

**Title:** **Comparison and Connection Between Service Design and Business Process Modeling**

**Description:** Many organizations use business-process management to increase their flexibility in meeting business goals and providing services. But business processes have become an effort of eliciting and executing detailed tasks, with focusing on the tasks' sequencing. An alternative way of modeling the services in an organization is with using SEAM, where the focus is on the "bigger picture" of collaboration and service exchange.

The goal of this project is to compare the two approaches of describing the activities within organizations (1) business process modeling and (2) SEAM services modeling.

Project consists of research and technical parts split in three milestones:

1. Get familiar with business process and SEAM. Understand the different domains where business process models and SEAM service models are mostly used [research part].
2. Get familiar with the CAD tools used to model business processes and SEAM service models. Find one representative case study and model it with the two. Analyze and critically compare the business process model and the SEAM service model [research and technical part].
3. *Optional:* Starting from the modeled case study, develop a working prototype for mapping the business process model to a SEAM service model and vice-versa [technical part].

Initial readings:

- G. Regev, O. Hayard and A. Wegmann. *What Have We Unlearned Since the Early Days of the Process Movement?* 2016. <https://infoscience.epfl.ch/record/218733>
- Weske, Mathias. *Business process management: concepts, languages, architectures.* Springer Science & Business Media, 2012.\*
- G. Regev, B. Bajic-Bizumic, A. Golnam, G. Popescu and G. Tapandjieva et al. *A Philosophical Foundation for Business and IT Alignment in Enterprise Architecture with the Example of SEAM,* 2013. <https://infoscience.epfl.ch/record/198962>
- G. Tapandjieva, A. Gopal, M. Grossan and A. Wegmann. *Patterns for Value-Added Services Illustrated with SEAM,* 2014. <https://infoscience.epfl.ch/record/200369>

**Prerequisites:** – Motivation to conduct a research based project.  
– Knowledge of web technologies, such as SOAP and REST

**Benefits for the student:** • Learn approaches and concepts used in the industry.

**Domain:** Business process modeling, services modeling

**Project type:** Master or semester project

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\* The complete book can be downloaded from within EPFL's network:  
<http://link.springer.com/book/10.1007/978-3-642-28616-2/page/1>