Enterprise Architecture

AW 20140111 (v4)

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http://lams.epfl.ch

WWW:
http://wiki.epfl.ch/lams-course-ea-paris-2014
(available for one month after the course)

Goal

The goal of this course is to:
- Operationalize Ross's advices and concepts (continuation of first lectures)

- Practice business and IT analysis and design using SEAM
- Understand the fundamental principles underlying business and IT analysis using SEAM principles as reference

- Have a knowledge of the main EA frameworks
- Some practice of Zachman, Urba-EA

- Practice the application of the fundamental principles to compare EA frameworks

- Practice of SEAM on EHL case study
- Practice of SEAM on your own project

Before class readings:

Wednesday:
> Popescu G., Regev G., Gopal A., Tapandjieva G., Wegmann A.
> EPFL Ph.D. Hiring Process Description
> November 22, 2013
> PDF to be provided

Tuesday:
> Wegmann A.
> On the Systemic Enterprise Architecture Methodology
> Proceedings of the 5th International Conference on Enterprise Information Systems, p. 483-490 (2003)
> http://infoscience.epfl.ch/record/89690?ln=en

Zachman J.A.
A framework for Information System Architecture
IBM Systems Journal: Volume 26, Number 3, Page 276 (1987)
http://test.zachmaninternational.com/index.php/ea-articles/28-1987-ibm-systems-journal-a-framework-for-information-systems-architecture

Friday:

Wegmann A.
Business and IT Alignment at the Ecole Hôtelière de Lausanne
2010
PDF to be provided

IT doesn't matter
Nicolas G. Carr
HBR 2003
(use google to find a version)

Teaching style

The course is problem-based, this means that I make you practice before teaching the theory!

The course outline might evolve during the course based on your progresses and feedbacks.

No documents will be given on paper. All forms will have to be hand-drawn by yourself. The goal is to save trees but also to show you that you can use these techniques at any time. No need to prepare, pre-print forms, etc.…

These facts might make you uncomfortable. This is ok and do not hesitate to speak about. These emotions are also part of the course's leanings! There is a co-construction of the course between you and me.

Wednesday January 8 (9h – 12h)

Introduction and expectations

Topic:
- Operationalization of Ross's framework (students recap)

Practice:
- Application to EPFL overall organization

Reference:
    Ross J. W., Weill P., Robertson D.
    Enterprise Architecture As Strategy: Creating a Foundation for Business
    Execution
    Harvard Business Review Press (2006)
    http://www.amazon.com/Enterprise-Architecture-Strategy-Foundation-
    Execution/dp/1591398398

Wednesday January 8 (14h – 17h)

Practice:
- Modeling of PhD hiring process (as-is)
- As-is (behavior model)
- Issue identification
- Relation to Ross models
- Solution design

Theory:
- Business and IT alignment
- SEAM modeling principles (system, behavior and goal/belief models)

Thursday January 9 (9h – 12h)

Practice:
- Modeling of PhD hiring process (as-is)
- Issue identification (goal-belief)
- Solution design (to-be)
- Relations to Ross's model

Theory:
- Systemic paradigm

Practice:
- Explanation of SEAM using the systemic paradigm

Thursday January 9 (14h – 17h)

Theory:
- From business / IT alignment to enterprise architecture
- Zachman
- Urba-EA
- (TOGAF)

Practice:
- Zachman model of PhD hiring process
- Urba-EA model of PhD hiring process

Friday January10 (9h – 12h)

Practice:
- application to systemic paradigm to compare SEAM, Zachman, Urba-EA

Practice:
- how to practically use the course's contents in your job

Friday January 12 (14h – 17h)

Practice:
- EHL case study & relation to IT doesn't matter paper

Course debrief & evaluation

Post-class readings:
> Regev G., Bajic-Bizumic B., Golnam A., Popescu G.,
> Tapandjieva G., Saxena A.B., Wegmann A.
> Business and IT Design with SEAM: an Illustration with the PhD Hiring
> Process at École Polytechnique Fédérale de Lausanne
> BMSD 2014

Exam

Date and time official announcement by administration

Total 20 points.

These three days lecture will account for 12 points.
Two to three questions:
- one model to draw and analyze based on a small case (7 points)
- 6 QCM questions (3 points, evaluated 0/1 and not -1/0/+1)
- 1 theory questions (2 points)

The 8 remaining points will provided by questions from Prof. Irina Rychkova
Closed book exam.

Homework

Deadline – see wiki.

Write one report with an analysis of your current project. Your goal is :
- to describe the existing situation with a SEAM diagram
- to describe it in text
- to describe the issues to address (and why they are issues)
- optional: to indicate the solution planned

The report should have the following properties:
- Name of company, your name, your email and the document date should be on the first page
- The SEAM model should be correct from the ontology standpoint (e.g. boundaries respected, notation correctly drawn, …)
- The SEAM model should show clearly the problem
- The SEAM model can be hand made and scanned
- The SEAM model should be readable (big enough, put it in landscape mode if needed)
- The overall report should be between 3 pages (including title page) and 5 pages max.
- You can send a draft version and get a feedback (from me or from one of my assistants)

The report should be sent by email to alain.wegmann@epfl.ch . Make sure you start the email with "iksem" in the title followed by your name (as email addresses do not always reflect real names sometimes).

A few "legal" statements:
- Do not write confidential info but still describe relevant information. Do not express opinions, just facts. We can always make SEAM analysis that do not contain confidential information but that show what is happening.
- I can share your report with my assistants, they might correct it (under my supervision).
- Your report will not be shown to anyone else, neither be put on the WWW.

The report will be evaluated and the grade will be part of the continuous evaluation of the course.

Additional References

Urba-EA:
    www.urba-ea.org
    Download the "brochure"

    Christophe Longépé
    Le projet d'urbanisation du SI : Cas concret d'architecture d'entreprise
    Dunod
    http://www.amazon.fr/Le-projet-durbanisation-darchitecture-dentreprise/dp/2100528831/ref=sr_1_1?ie=UTF8&qid=1389088484&sr=8-1&keywords=longépé

TOGAF:
    http://www.opengroup.org/togaf/