Enterprise Architecture

AW 20140107

Prof. Alain Wegmann
http://lams.epfl.ch

WWW:
http://wiki.epfl.ch/lams-course-ea-paris-2014

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

- Practice of SEAM on two case studies (EHL and OFS)

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

Friday:
> 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

Lectures

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
- BPMN
- (TOGAF)

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

Friday January10 (9h – 12h)

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

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

Friday January 12 (14h – 17h)

Practice:
- EHL case study

Course debrief

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

January 16 (9h – 10h30) – 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)
- 5 QCM questions (3 points)
- 1 theory questions (2 points)

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

Closed book exam.

References

Urba-EA:
> 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/

Archimate:
> Mark Lankhorst
> Enterprise Architecture at Work: Modelling, Communication and Analysis
> Springer
> http://www.amazon.com/Enterprise-Architecture-Work-Communication-Engineering-ebook/dp/B00A9YH01Y/ref=sr_1_1?ie=UTF8&qid=1389088571&sr=8-1&keywords=lankhorst

BPMN:
> http://www.bpmn.org
> http://www.omg.org/bpmn/Documents/Introduction_to_BPMN.pdf