# Teaching: Enterprise architecture "connects the dots" (thus creating a holistic system from the constituent parts)

## 1 Teaching description

#### 1.1 The problem to be addressed

At present, there are many IT-related methodologies, technologies, tools and schools of thoughts which overlap and contradict each other. The best practices are actually the best only in particular situations. Often decisions are taken on the in-complete and subjective base. All of this tremendously complicates the modern information systems thus reducing their potential effectiveness and efficiency.

## 1.2 Objectives

The purpose of this course is to provide the basic knowledge necessary to better understand how to deal with the increasing complexity of the information technologies to obtain the synergy between business needs and IT potentials.

## 1.3 The approach

The course is based on the practical use of Enterprise Architecture (EA) which a methodology and practice for executing the strategy.

EA provides understanding of and insight into "operations", and rationale and foresight for "transformation" (i.e. changes). What is "transformation" today, becomes "operations" tomorrow – hence understanding and insight into "transformation" is equally important. It is a closed loop.

EA uses a complete expression of the enterprise to produce and execute a master plan which acts as a "collaboration force" between aspects of business planning such as goals, visions, strategies and governance principles; aspects of business operations such as business terms, organization structures, processes and data; aspects of automation such as information systems and databases; and the enabling technological infrastructure of the business such as computers, operating systems and networks.

## 1.4 Learning outcomes

The trainees will

1) learn about modern information technologies;

- 2) learn how those technologies are working together for a systematic architeching, design, implementation, operations and evolution of information systems;
- 3) be able to better understand different IT subject matter expects;
- 4) be equipped with techniques to control the complexity of information systems.

## 1.5 Target audience

The top management in the IT area, e.g. CIO, CTO, head of PMO, head of architecture.

## 1.6 Requested knowledge

General knowledge of IS/IT

General management experience

## 2 Layout of the teaching

Teaching will be given as a set of 20-30 minute off-line (pre-recorded) lessons. Each of them is dedicated to a specific part of the big picture and how this part works together with other parts. Each lesson may have a few simple exercises.

Each week 2-3 topics will become available for the students. They may send e-mails to the lector. Also the lector will be available for an on-line chat each week (for example, 1-1.5 hours every Saturday).

At the end of the teaching, the students will be asked to prepare a small "essai" with applying one of the topics for their practical situation.

The lector will be available for 1.5 -2 days for face-to-face discussion.

## 3 Main topics

First 7 are generic; the rest are IT-related

- 1. Enterprise architecture as a tool to manage the big picture
- 2. Architecting systems
- 3. Writing the strategy (make your logic explicit in advance)
- 4. Business Process Management (BPM) [or management by processes] part 1
- 5. Business Process Management (BPM) [or management by processes] part 2
- 6. Maturity models
- 7. Management and governance (+PMO)
- 8. E-government and e-governance
- 9. Structuring the IT department
- 10.BPM, SOA and SDLC

- 11. Agility by platforms
- 12.ECM and "paperless" office
- 13. Risk management and explicit security
- 14. Modern disruptive technologies: FOSS
- 15. Modern disruptive technologies: Cloud
- 16.Enterprise patterns
- 17.ITIL as a BPM application
- 18.Conclusion

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