Syllabus

Enterprise Architecture and Modelling



- Instructor: Géza Morvay (See last page for bio sketch) Tel: +36 30 680 2933 (mobile) E-mail: geza.morvay@gmail.com Office: Office hours: 1 hour before or after the class meets, upon prior agreement
 - **Credits:** 1.5
 - **Term:** Winter 2017-2018
 - Course level: MSc
 - **Prerequisites:** No prerequisites

Course Availability

Students from the MS in Technology Management and Innovation program have direct entry (first priority).

Students from other programs/departments are automatically placed on the waitlist. If spaces are left, they will be added to the course on a first comes first served basis.

Course Description and Objectives

Brand new business ideas, products, service models or "only" permanent change and adaption to stay competitive – the right strategy is always essential... but will not work on its own... It must be brought "down to earth" i.e. implemented, rolled out, made it happen. There is a wide "soft – hard" scale of management answers to this challenge: while Organisational Development (OD) focuses on the necessary human and "soft" aspects, there is a "hard" business and technology-system focused toolset: Enterprise Architecture (EA).

"EA is about understanding all the different elements that go to make up the enterprise and how those elements interrelate." (The Open Group, 2008).

It is a structured but pragmatic approach to successfully turn strategic goals into aligned actions by

- managing an enterprise as a complex system (architecture) of integrated elements (e.g. organisation, processes, technology systems, etc.),
- handling the relationship and interdependencies of these elements and aligning them,
- reacting to change triggers and orchestrate the necessary transformations in every architecture layer

The objective of the course is to give a wide, but high-level overview of Enterprise Architecture (EA), its goals, approach, scope, methodologies, tools, deployment, and results. Students will see how large and mid-size corporations benefit from EA (understanding the big picture, handling complex dependencies, enabling better planning and decision-making, improving communication, and understanding between top-and midlevel managers, integrating business and IT/technology transformations, etc.). The difference, relationship and connection between EA and other widely-used methods, best practices, frameworks will be clarified.

Beyond theory throughout the course students will intensively work on a series of EA issues using examples form the car industry and car sharing.

Learning outcomes

Core Learning Area	Learning Outcome
Interpersonal Communication Skills	Students will be able to express and supplement their
	own analysis and conclusions using EA terminology,
	business & IT architecture models as a platform of
	common understanding.
Technology Skills	Students will understand standard EA models and will
	have an overview of the leading EA modeling software
	suites.
Cultural Sensitivity and	Students will have increased understanding and
Diversity	acceptance of diversities of business and IT viewpoints.
Quantitative Reasoning	Students will learn how to apply metrics, indicators, risk
	evaluations related to EA model building blocks and
	objects.
Critical Thinking	Students will be encouraged to question the "we always
	did it this way" business thinking and the usage of
	traditional patterns.
Ethics and Responsibility	Students will be able to better understand and clearly
	allocate responsibilities within an organization using EA
	models.
Management Knowledge and Skills	Non-EA managers will have basic knowledge & skills to
	elaborate EA models, apply EA approach & methods and
	use EA in management decision and communication
	situations.

Reading list

Required reading:

"TOGETHER – Strategy 2025 (Volkswagen Group)" https://www.volkswagenag.com/en/group/strategy.html

"About GreenGo" https://www.greengo.hu/rolunk.html

Suggested reading:

"The Framework for Enterprise Architecture: Background, Description and Utility by: John A. Zachman" https://www.zachman.com/resources/ea-articles-reference/327-the-framework-for-enterprise-architecture-background-description-andutility-by-john-a-zachman

"TOGAF (The Open Group Architecture Framework)" http://www.opengroup.org/publications/togaf

Assessment

The course grade will be based on a number of different evaluation elements.

- Individual class participation 40%
- Student Team Presentation 30%
- Final Reflection Paper 30%

Grade	Quality rating	Grade points Awarded
Α	Outstanding	4.00
A-	Excellent	3.67
B+	Very good	3.33
В	Good	3.00
B-	Satisfactory	2.67
C+	Minimum pass	2.33
F	Fail	0.00

The instructor reserves the right to adjust the scale, that is, to grade on a "curve", should he find that significantly more than the usual number of students would not pass the course under the indicated grading scale or should the distribution of the grades represent an unrealistic pattern.

Individual Class participation – 40%

40% of the grading points will be earned by a student for class participation.

Class activities include:

- Evidence of preparation,
- Contributions to class discussion,
- Bringing real life examples based on own working experience,
- Raising thought provoking questions
- Voluntary short presentation of an instructor pre-defined topic relevant for the class session's planned topic (also in small groups allowed)

These points are subjective by nature. The instructor will do his best to be as fair as possible, but this grading element is not open for discussions.

Student Team Presentation – 30%

Student teams are asked to prepare a series of groupwork assignments during the course sessions. Each group will also be asked to prepare a short, 5 minutes presentation with the summary of their ideas and findings after each groupwork. This will take place in Session 1,2,3,4, and 5. The four groupwork assignments will be logically connected and will cover the different EA dimension of the same business problem. Some case and context information and a beginning set of sources for this assignment will be provided. However, largely each study group is asked to conduct its own research seeking other relevant sources from the field in preparing for these assignments. Each study group is expected to offer a presentation in Session 6 based on the previous groupwork results and research, that will last 20 minutes and then allow for another 20 minutes for discussion and questions in class together. The presentation should be given in PowerPoint or Prezi and should be handed in before the beginning of the relevant session.

Final Reflection Paper - 30%

Same Student Teams are then asked to write a final reflection paper by the end of the course. The paper should include the essence of the case assessed in the previous assignments and conclusions of the discussion in class. This paper should not exceed 15 pages (double spaced), including exhibits, figures, charts, etc. The final paper is due 7 days after the last session (Please submit via Moodle). Instructor will provide a written evaluation of the paper.

Academic Integrity

The Instructor expects all students to adhere to the fundamental principles of academic integrity in any and all behaviours associated with their course work and otherwise, as stated in the CEU Honor Code (see Student Handbook). Attempted cheating of all forms is treated extremely seriously and can result in dismissal from the University.

Course schedule and materials for each session

All classes will be interactive in format, and the expectation is that all students will thoroughly prepare and actively participate. A combination of lectures, debate discussion, team presentations, and written assignments will be used. The invitation of guest speakers with significant EA and transformation experiences is underway. Planned session agenda may change based on guest speaker availability.

Main Topics & Schedule

Basic course logic:



Session #1 12th of January, Friday

Course introduction Enterprise Architecture basics (main goals, definition, history, strategic context, methods, frameworks, usage, benefits) Introduction of the cases form the car and car- sharing industries Group assignment

Session #2 26th of January, Friday

Student presentation (voluntary) Defining business goals Importance of modelling and visualization Architecture layers: organization and business processes Group assignment Reading: "TOGETHER – Strategy 2025 (Volkswagen Group)" "About GreenGo"

Session #3 9th of February, Friday

Student presentation (voluntary) TOGAF (The Open Group Architecture Framework) Architecture layers: data architecture and application architecture Group assignment

Session #4 23rd of February, Friday

Student presentation (voluntary) EA modelling tools, live demonstration Architecture layers: IT infrastructure, other technology infrastructure Group assignment

Session #5 9th of March, Friday

Student presentation (voluntary) Architecture change management: Project portfolio and program management Enterprise architecture as a corporate function Group assignment

Session #6 23rd of March, Friday

Student team presentations Course summary

Brief Bio of the Instructor

Mr. Géza Morvay – the instructor in charge for the course - has a strong business & IT background: he has over 30 years of experience working for Hungarian and Multinational companies in different operational, management and consulting roles. He is currently Senior Consultant at RedBridge, one of the leading EA consultancies in Hungary. His previous positions were Director of IT/CIO at the private energy holding E.ON Hungaria (4 years), Head of Strategic IT Advisory Services/Partner of KPMG Consulting Hungary (5 years), Head of IT Operations/Data Centre at GENERALI-Providencia Insurance (5 years), further he worked as an independent Management Consultant on many projects. He was a software engineer in the first period of his professional career (10 years).

He gained experiences in industries critically depend on business aligned IT systems and services. He managed IT architecture aspects of challenging business transformation scenarios: mergers, acquisitions, reorganizations, outsourcing to shared services, market opening, unbundling. He worked in different international environments (CEE, Germany, Austria). He was involved both in strategic architecture

transformation-, IT system implementation-, IT organization- and process development projects and management tasks. Mr. Morvay holds an MSc in Electrical Engineering, he is Certified Management Consultant, he attended numerous management trainings and courses, he is a Founding Member of Enterprise Architecture Management Professionals Association (EAMP, VAMSZ).

Mr. Morvay is working with CEU Business School as a Senior Adjunct Lecturer since 2003 in the field of IT Management, IT Strategy and Enterprise Architecture subjects.

Mr. Ákos Bálint – special recurring guest speaker bringing extra case based real life content - has a strong management consulting background: he has over 18 years of experience working as a consultant for Hungarian and Multinational companies. He is currently Partner and Managing Director of RedBridge Consulting, one of the leading EA consultancies in Hungary. His previous positions were manager consultant at AAM Consulting Hungary (13 years) and Director of services at HyperTeam consulting.

He gained architecture management experiences in several industries. His Management Consulting project repertoire includes engagements in Business Architecture (BA), Enterprise Architecture (EA), as well as engagements in the areas of Business strategy, ERP, and other IT system implementations. He worked in different international environments (CEE). Mr. Bálint holds an MSc in Civil Engineering and Psychology, he is Certified Management Consultant and Certified Projects Director (IPMA A), a certified TOGAF 9 professional. Mr. Bálint is Founding Board Member of Enterprise Architecture Management Professionals Association (EAMP, VAMSZ), member of Association of Enterprise Architects (AEA), and Board Member of Ipmacert.hu (IPMA Hungary Certification Body).

Mr. Bálint is special guest speaker for Enterprise Architecture since 2015.

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