Syllabus

Digital Transformation

- **Instructor:**   Achilles Georgiu (See last page for bio sketch)
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  Office hours: 1 hour before or after the class meets, upon prior agreement

- **Credits:**   2
- **Term:**   Winter 2017-2018
- **Course level:** MA/MSc

Prerequisites: No prerequisites

Course Availability

Cap: 74
Students form the MS in Business Analytics and MS in Technology Management and Innovation programs have direct entry (first priority).
Students from other programs and departments are automatically placed on the waitlist. If spaces are left, they will be added to the class on a first comes first served basis.

Course Description and Objectives

The past ten years have brought a fundamental change in our lives, and the reason for the changes was technological development itself. In times of crisis and continuously changing environment there is an evidence need for creativity and innovation to stay in front of others. Technologies of the new era are surrounded by data and are changing the business and market dynamics. Technology now ranks as the number-one factor impacting organizations, it revolutionizing products, operations and business models. In this technology driven business environment competition may come from anywhere. The business boundaries have been blurred and a disruptive innovation may even take many companies out of the game. There is no doubt that technology is re-shaping the business landscape but the main question is how and why now?

This course will be made up of interactive conceptual presentations and a workshop series with guests from all across the industries. The aim of this course is to give students business insights based on current and future technology trends and to raise the awareness of the audience about the rapid evolution of Technology by building up thoughts around ways how to adapt them in our everyday life.

The main objective of the course is to share practical knowledge and to help the audience understand the managerial and non-technical challenges in order to use the technology successfully. In order to achieve this, we will need to establish strong interactive sessions by bringing into the class real examples and field experiences.

Learning outcomes

Core Learning Area	Learning Outcome
Interpersonal Communication Skills	Introduce students to the terminology of Digital Transformation. Improve ability to communicate and co-operate with technology managers and specialists. Demonstrate competence in effective writing and oral communication.
Technology skills	Get a close view to new technologies which will influence strategic business decision making now and in the future. Better understand the way of leveraging them.
Cultural Sensitivity and Diversity	The course will refer to some national and cultural variations in business practices, and also will underline the need to understand the context in which technology is applied. Students will be familiar with the human oriented aspects of the digital invaders.
Quantitative Reasoning	Reasoning in relationship to a particular business plan is very important for managers: quantitative issues will be discussed in relation to Technology (TCO, ROI)
Ethics and Social Responsibility	The course will give an insight into the tasks and challenges of Technology Management and Innovation.
Management Knowledge and Skills	Gain basic knowledge and skills to recognize the contributions of technology to business needs situations/scenarios. Enabling students to discuss technology-related issues with both professionals and business. Have a clear understanding of the role of the Technology in enterprises.

Reading list

"Disruptive Technologies: Advances that will transform life, business and the global economy (MGI)"
http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/disruptive-technologies

"Facing the storm: Navigating the global skills crisis (IBM)"
https://www-935.ibm.com/services/us/gbs/thoughtleadership/skillsstorm/

"Top 10 strategic trends outlook for 2017 (Gartner)"
https://memeburn.com/2016/09/gartner-10-tech-trends-2017/

"FutureScape: Worldwide IT Industry 2017 Predictions (IDC)"
https://www.idc.com/getdoc.jsp?containerId=US41883016

"Megatrends The five global shifts reshaping the world we live in. (PWC)"
https://www.pwc.co.uk/megatrends.html

Assessment

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

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

Grade	Quality rating	Grade points Awarded
A	Outstanding	4.00
A-	Excellent	3.67
B+	Very good	3.33
B	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

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% (WORKSHOP)

Student teams are asked to work on a specific task together during the 5th session of the course. Each study group will be asked to prepare a presentation that comprises an analysis and assessment of a Smarter City problem which will be given to them during the class. Each study group is expected to offer a presentation that will last 10 minutes and then allow for another 5 minutes for discussion and questions in class.

Final Reflection - 30%

After the end of the course students are asked to prepare an Infographic about a Digital Transformation story. The story can be company or industry specific or it can be a personal experience. The infographic can be escorted by a short description which should include the essence of preparation work together with the main conclusions. This paper should not exceed 5 pages and the main focus should be on the infographic element. The final reflection is due 7 days after the last session (Please submit via Moodle). Instructor will provide a written evaluation on it.

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.

Main Topics & Schedule

- Technology and the Business Environment, Foundation Concepts
- Areas of IT management and its challenges, IT services, IT organisation
- Enterprise Innovation and the Digital Transformation
- Industry, development trends, business competitiveness due to Technology
- Using Technology as Innovation, Integration and Interconnection of business

Session #1   21st of February, Wednesday
Information Transformation: Homo Informaticus
What has changed in the last decade? How everyday people use technology? How has our mind reacted to that? Agenda, expectations, High level introduction of Digital Transformation.

Session #2   28th of February, Wednesday
Technology Transformation: Managing IT Trends & Emerging Technologies
We will present the future of Technology evolution, learn how to get advantage of Cloud, robotics, Big Data, Internet of Things and the new technological developments, how organizations can effectively and efficiently anticipate, assess, introduce, and leverage them. How can we use these new technologies in our everyday life? What is the big buzz around them?

Guest: Komáromi Zoltán – Managing Director at IDC

Session #4   7th of March, Wednesday
e-Ledership Transformation: CxO challenges, the role of the Chief Information Officer
The future CEO is leading through connections and has identified Technology as the most important external force impacting their organizations. Customers and citizens expect to be treated as individuals, which means knowing what makes each of us "tick": our values, beliefs, habits and quirks. That, in turn, requires much closer collaboration between organizations and the people they serve. Role and challenges of the CIO, how can they help their organizations adapt to the accelerating change and complexity that mark today's competitive and economic landscape. CIO's mandates come with distinct characteristics that line up with the organization's goals and strategy.

Guest: András Svebis – CIO at MOL

Session #5   14th of March, Wednesday
Workforce Transformation: Millennials are penetrating the workplaces
In this continuously changing environment the way how we engage our people also need to be more adaptive than ever before. We are in the middle of a generation shift, millennials are penetrating our workplaces. Many think that they are useless and cannot be loaded with work, they are just different and they need to be treated accordingly. How empower people and boost team collaboration? How to manage talents and work with Y generation employees? How to drive the cultural change and keep the momentum going? Technology will replace a lot of regular jobs over 2 billion jobs will disappear by 2030. Not only in the production industry, but even office workers are in jeopardy and might be replaced by robots, artificial intelligence, big data, or automation…

Guest: Robert Byssz – Global Director of Digital Transformation at Philips

Session #5   21ˢᵗ of March, Wednesday

Csudapest... Smarter City workshop

In the Smarter City Workshop students will have the opportunity to work in teams in a role of Digital Transformation Consultants. Each team will receive a use-case of an imaginary city facing typical challenges of 21th century. Through this workshop the teams will have the chance to develop their own transformation strategy using the concepts learned during the course. At the end of the workshop each team will present their own transformation strategy.

Session #6   28ˢᵗ of March, Wednesday

Society Transformation: Intelligent use of Technology in the world

How forward-thinking leaders in business, government and civil society around the world are capturing the potential of smarter systems to achieve economic growth, near-term efficiency, sustainable development and societal progress. Energy, Healthcare, Environment, education. Showing the growing importance of Information and Communication Technologies, social and environmental capital in profiling competitiveness. What will influence our future in the following five years? What are those inventions that will change the world within five or ten years from now; similar to what has changed it during the last 10 years. Closing, Wrap Up, Lessons learned...

Brief Bio of the Instructor

Achilles Georgiu is the Program Director of MSc in Technology Management & Innovation and the Industrial Director of MSc in Business Analytics program at the Department of Economics and Business in CEU. He is also a Senior Adjunct lecturer of Digital Transformation and Leadership courses at the various MSc programs of the school. Besides MSc degrees in Computer Sciences and Informatics Management, he has more than 18 years of international and multicultural experience from the field and ample knowledge of standard IT management and control frameworks with special focus on personalized human motivation, team building and performance management. He worked for several international companies and he is currently working at IBM as the Technology Support Services Director and being a Subject Mater Expert of solution sales and cross industry specializations. As an Opinion Leader, his personal objective is to burn pictures in people's mind via metaphors and visual stories in order to transform them to future e-Leaders, who understand technology evolution and the adaptation to everyday business environment. (for more: www.georgiu.hu)

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