

Course 1: Enterprise Management in Digital Economy

Course Objective:

Digital economy has brought business entities to the limits of their capacity of traditional resources and competences while transforming the markets and opening new strategic approaches for business management. . The objective of this course is to provide the students with knowledge and competences on using integrated and system solutions in advancing the management to the requirements of Digital Economy. In this course students will learn on how to adopt management, its strategies and functions to smart and sustainable solutions that 4.0 era has brought to enterprises.

Learning Outcomes:

The students on the completion of this course would be able to

1. Analyze and recommend the use sustainable business model with digital technologies and tools in order to improve market performance of specific companies (analyze)
2. Define and assess the strategy (strategic objectives, mission and vision, competitive factors, company functions: production; purchasing; marketing; logistics, financing, human resources) of I4.0 oriented companies (create)
3. Define and assess internal and external driving factors for digitization and position them in strategy and business model (evaluate)
4. Propose organizational structures appropriate for I4.0 set-up (apply)
5. Use strategic analysis tools to understand internal and external determinants influencing the company performance and propose improvements with different approaches (evaluate)
6. Demonstrate entrepreneurial attitude towards I4.0 opportunities for business (analyze)

	CLO1	CLO2	CLO3	CLO4	CLO5	CLO6
Formative assessment method						

Class discussions	X	X			X	X
Project related individual assignments	X		X	X		
Project group assignments		X				
Summative assessment method						
Final group project report	X	X	X	X	X	X
Final group project presentation	X	X	X	X	X	X
Peer evaluation	/	/	/	/	/	/

Course outline (modules / topics)

- I. Business perspective to understand the digital economy and its influence
 - A. How digital economy innovations and its social context impacts different types of businesses?
 - B. Digitalization in the context of needs, markets, channels, products and services and management and organizational set-up - identification of different way digital era changes the business
 - C. How the pace of changes affects the business in the digital economy: New business imperatives
 - D. Organizational structures and management functions of today: reshaping structures, combining resources and competences and building relations
- II. Sustainable and digital: new patterns for strategies and business models
 - A. Strategy or business models? Different approaches to lead your business
 - B. Sustainable or digital: Emerging business models and its components
 - C. Following technical innovations with sustainable business models
 - D. Defining unique value proposition and designing customer relationships
 - E. Collaboration and competition in the age of networking
 - F.
- III. Strategic analysis tools and its use to capture the competitive advantage in digital economy
 - A. Business model canvas: capturing the key of digital business
 - B. Mapping the value streams: visualizing the flows and relationships

Decision support with strategic analysis tools: business at strategic crossroads

Prerequisite: basics of management

Learning Resources:

Textbook: No designated textbook, but class notes and handouts will be provided

Reference books and articles:

1. N.J. Foss, T. Saebi (Eds.), Business Model Innovation: the Organizational Dimension, Oxford University Press, Oxford (2015)
2. P. M. Abernathy, J.A. Sciarrino, The Strategic Digital Media Entrepreneur, Wiley-Blackwell, (2018)
3. A. Osterwalder, Y. Pigneur, Business Model Generation: a Handbook for Visionaries, Game Changers, and Challengers, Wiley, Hoboken, NJ (2010)
4. Jun Xu, Managing Digital Enterprise, Atlantis Press 2014
5. A. Ustundag, E. Cevikcan, Industry_4.0_Managing the Digital Transformation, Springer Series in Advanced Manufacturing, 2018
6. D. Wiraeus, J. Creelman , Agile Strategy Management in the Digital Age, Springer International Publishing_Palgrave Macmillan (2019)
7. P. Novo Melo, C. Machado, Management and Technological Challenges in the Digital Age-CRC Press (2018)
8. M. Skilton, Building Digital Ecosystem Architectures: A Guide to Enterprise Architecting Digital Technologies in the Digital Enterprise. Springer International Publishing Palgrave Macmillan (2016)
9. K. Sandkuhl, J. Stirna - Capability Management in Digital Enterprises-Springer International Publishing (2018)

Journals and Magazines:

Long Range Planning
Organizational Science

Teaching and Learning Methods:

This is an project-based course. During the course, the students, would be divided into project groups that would be coupled with partner companies that are challenged with digital economy issues. Each group would prepare strategy and business model and perform strategic analysis for real life business conditions. All the tasks, group and individual, would be assigned to the specific project. .

Time Distribution and Study Load:

Lectures: 15 hours

Workshop and project: 60 hours

Study visits and consultation with business partners: 15 hours

Self-study: 45 hours

Evaluation Scheme: The final grade will be computed according to the following weight distribution: Class discussions (15%); Individual assignments and presentations (20%); Group assignments and presentation (15%); Final group project report (20%); Final group project presentation (20%); Peer Assessment (10%).

An “A” would be awarded if a student can demonstrate clearly skills in developing strategy and business models and perform strategic analysis.

A “B” would be awarded if a student can show good progress in developing strategy and business models and perform strategic analysis.

A “C” would be given if a student can show reasonable progress in developing strategy and business models and perform strategic analysis.

A “D” would be given if a student shows a lack of improvement in developing strategy and business models and perform strategic analysis.