SUBJECT DATASHEET

DIGITAL TRANSFORMATION

BMEGT35A115

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name
DIGITAL TRANSFORMATION

ID (subject code)	BMEGT35A115

Type of subject
contact lessons

Course types and lessons

Type	*Lessons*
Lecture	2
Practice	0
Laboratory	0

Type of assessment
exam grade

Number of credits
3

Subject Coordinator

Name	*Position*	*Contact details*
Dr. Somogyi Róbert	assistant professor	somogyi.robert@gtk.bme.hu

Educational organisational unit for the subject
Department of Finance

Subject website
https://edu.gtk.bme.hu

Language of the subject
magyar - HU

Curricular role of the subject, recommended number of terms
Programme: **Finance and Accounting Bachelor's Programme from 2019/20/Term 1**
Subject Role: **Compulsory**
Recommended semester: **4**

Direct prerequisites

Strong	None
Weak	None
Parallel	None
Exclusion	None

Validity of the Subject Description
Approved by the Faculty Board of Economic and Social Science (25.11.2020.) with the 13th decision on the 581083/2/2020 registration number that is valid from 25.11.2020.

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The subject is designed to give the students a broad overview of the processes of digital transformation and highlight its importance in a variety of industries. The subject presents the business model of two-sided markets, a.k.a. two-sided platforms. E-commerce in general and online marketplaces in particular are good examples for such two-sided platforms; therefore the subject puts particular emphasis on this topic. The students will learn about the importance of such platforms in several industries by discussing case studies. The subject also covers issues related to the regulation of the internet, as well as information security and the basics of business intelligence, and the digitization of consumer centricity. Teaching focuses on enabling students to recognize and implement elements of digitization in practice at their future workplaces.

Academic results

Knowledge

1. is able to use of terminology and concepts of digital transformation.
2. understands the depth and scope of changes that digital transformation has brought about in society in general, and in business in particular.
3. understands the logic of the two-sided platform business model and the role that digital transformation has been playing in its development.
4. understands the basics of information security and business intelligence and their importance.

Skills

1. is able to use the concepts to analyze, renew, and critically assess the digital transformation processes in their company.
2. is able to provide plans to further the digital transformation in their company.
3. is equipped with skills to develop arguments and high-level plans for digital transformation.
4. has the skills to work together with ICT experts, developers and other economists in projects.

Attitude

1. is responsive to the use of novel ICT techniques.
2. is open to any form of digital transformation.
3. continuously monitors and critically assesses the potential introduction of new digitalization processes.

Independence and responsibility

1. is able to work independently under general supervision, and continue learning new skills in the field of digital transformation.
2. actively participates in lectures, discussions of case studies and group projects.
3. takes responsibility for their own actions, deliverables and decisions.

Teaching methodology

The class is delivered through a mix of standard lectures and case study discussions, also using on-line technolo-gies. Students need to use ICT tools, and they are given individual and optional team assignments as well.

Materials supporting learning

- z előadások prezentációinak anyaga, ami a félév során folyamatosan fog feltöltésre kerülni./
- Lecture slides that will be uploaded continuously during the semester.
- Digitális transzformációról szóló HBR tanulmányok, valamint HBS esettanulmányok./
- HBR papers and HBS case studies along with study notes and handouts by the instructors.
- Nemeslaki András (2012): Vállalati Internetstratégia, Akadémiai Kiadó, Budapest.
- ISBN 9789630591898 (in Hungarian)
- Laudon and Laudon (2019): Management Information Systems: Managing the Digital Firm, Pearson, New-York. ISBN-13: 978-0135191798
- Belleflamme, and Peitz (2015) . Industrial organization: markets and strategies. Cambridge University Press, ISBN-13: 978-1107069978

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

Assessment of the learning outcomes described under 2.2. is based on a written exam. The written exam can be replaced by written homework
and active participation in the lectures.

Performance assessment methods

A) Detailed description of performance evaluation during the semester: Course participation (50%): Students' participation and activity are assessed by the instructor(at the end of the semester. Maximum 50 points can be achieved from this. Voluntary homework (50%) preparation of a 10-12 page ppt presentation on a topic discussed during the semester. Maximum 50 points can be achieved from this. The
exam can be replaced by these two tasks, i.e. by a combination of written homework and course participation. If a student decides to take the exam, the written homework and course participation are not taken into account for the final evaluation. B) Performance evaluation during the end of semester (the examination period): Written performance evaluation: The exam lasts at most 50 minutes and contains multiple-choice and case study questions. A maximum of 100 points can be achieved in the exam.

Percentage of performance assessments, conducted during the study period, within the rating

- **Active participation in lectures**: 50%
- **Homework**: 50%

Percentage of exam elements within the rating

- **Written exam** : 100%

Conditions for obtaining a signature, validity of the signature

Az aláírás megszerzésének a TVSZ-ben rögzített általános szabályokon túl nincs feltétele. A megszerzett aláírás a TVSZ szerinti időtartamig érvényes.

Issuing grades

Excellent	90%-100
Very good	85–90
Good	76–85
Satisfactory	63–76
Pass	50–63
Fail	0-50

Retake and late completion

Correction and replacement are according to standard regulations (TVSZ).

Coursework required for the completion of the subject

Participation in contact lectures	14x2=28
Preparing for the lectures	14x2=28
Preparing the presentation and preparing for the exam	34
total	90

Approval and validity of subject requirements

Consulted with the Faculty Student Representative Committee, approved by dr. Lógó Emma, Vice Dean for Education Valid from February
1, 2021

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

Subject includes the topics detailed in the course syllabus to ensure learning outcomes listed under 2.2. can be achieved. Timing of the topics may be affected by calendar or other circumstances in each semester.

1 Introduction to digital transformation
2 Two-sided platforms, game console case study
3 Two-sided platforms, mathematical modelling
4 Two-sided platforms, e-commerce case study
5 Digital transformation of the hotel industry, case study
6 Fintech and digital payment platforms
7 The regulation of the internet – net neutrality
8 Information society and emerging technologies
9 Information security I
10 Information security II
11 Information management and business intelligence
12 Operational excellence
13 Digitization of customer centricity
14 Summary, presentations

Additional lecturers

Approval and validity of subject requirements

Part I-III of the Subject Form is to be approved by the Head of Department of Finance named under 1.8.