Sabancı BA Program
Fall 2020-2021
MGMT 421 – Technology Awareness and Implications of Technology Trends to Business Life and Processes

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Web: SUCourse
Office Hours: by appointment, or exact time specified

Type	Time	Days	Where
Class	11:40 am - 13:30 pm 10:40 am - 11:30 pm	T W	FASS Online

Course Objective:

The objective of this course is to explore latest trends in technology and areas of their successful application, the relationship among different technologies and how they influence each other, how new technologies trigger digital transformation and influence business and daily life. Students will learn how to effectively and efficiently evaluate trends and emerging technologies in business life and management and help their organizations describe, select, and implement these new technologies to their business processes and work.

This course will present students new directions in technology and effective methods for assessing their significance and applicability to their business environments as well as the new challenges and problems that they foster. They will learn about emerging technologies and the latest trends and applications in terms of what problems they address and in specific, how organizations can use them for competitive advantage.

Within the context of the course, new technologies that influence the world, daily life and work processes as well as successful application areas and case studies will be introduced; the influence of such technologies on different industries will be emphasized. The goal is for the student to understand how these new technologies can be integrated to work processes and organization through using the right methods and therefore differentiate and gain a competitive advantage. The status of new technologies and how they should be assessed and positioned in business models or plans, and the methodologies in applying new technologies will be presented.

Upon the completion of this course, the students will be able to behave as the CDO (Chief Digital Officer) and take precise decisions during the continuous digital transformation process of the organizations they choose.

Learning Outcomes:

Upon successful completion of this course, the student will be able to:

1. Examine and assess emerging technologies, such as artificial intelligence, internet of things, mobile communications, big data, analytics, digital marketing, robotics, wearables, cloud computing, augmented reality and virtual reality
2. Understand the impact of emerging technologies on business processes and work environment
3. Combine the most significant overall trends in digital technologies and the economic and social effects of these trends
4. Identify the critical factors affecting the successful adoption of new technologies
5. Recognize the key characteristics, business benefits, risks, and cost aspects of new technologies
6. Define technology trends that currently influence or are likely to influence the choice of new technologies over the following period

7. Describe how value can be generated through the practice of customer dedicated technology trends and study the steps to be taken in carrying these technologies to large population

8. Evaluate the function of technology trends in general business strategy and examine how these trends should be assessed in each department.

9. Help achieve the integration of the tools in using new technologies with the competences of the organizations and outline the strategies in establishing customer experience.

Course Material:

This course will include a series of readings, which include articles, books and essays that explore technology and its broader implications on organizational success.

1. Readings

2. Group Projects

3. Guest speakers of leader technology companies, i.e. Turkcell, IBM, Samsung, TTGV, Yapı Kredi Bank, MasterCard, etc.

The lecture materials such as slides, case studies and study texts are accessible for students via SUCourse.

List of Cases

Case 1   **Date:**   October 20th, 2020

Case: Starbucks
Type: Paper
Subject: Starbucks's Digital Strategies
Teamwork: No
Grading: Both

Case 2   **Date:**   November 10th, 2020

Case: Netflix
Type: Paper
Subject: Netflix's Growth Strategy
Teamwork: No
Grading: Both

Case 3   **Date:**   November 24th, 2020

Case: Uber
Type: Paper
Subject: Uber's Digital Strategies
Teamwork: No
Grading: Both

Case 4   **Date:**   December 8th, 2020

Case: Amazon
Type: Paper
Subject: Amazon's Growth Strategy
Teamwork: No
Grading: Both

Case 5   **Date:**   December 29th, 2020

Case: Tesla
Type: Paper
Subject: Uber's Digital Strategies
Teamwork: No
Grading: Both

Optional Reading Material:
   1. Industry 4.0: A survey on technologies, applications and open research issues Lu, Y. (2017). Industry 4.0: 6, 1-10.

2. Digital Transformation: Opportunities to Create New Business Models (Berman, S. J. (2012). Strategy & Leadership, 40(2), 16-24.)

3. Strategy, Not Technology, Drives Digital Transformation (Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2015). MIT Sloan Management Review and Deloitte University Press, 14, 1-25.)

4. Innovation as a Learning Process: Embedding Design Thinking (Beckman, S. L., & Barry, M. (2007). California management review, 50(1), 25-56.)

5. Investigating the Effects of Smart Technology on Customer Dynamics and Customer Experience (Foroudi, P., Gupta, S., Sivarajah, U., & Broderick, A. (2018). Computers in Human Behavior, 80, 271-282

6. Business Intelligence and Analytics: From Big Data to Big Impact (Chen, H., Chiang, R. H., & Storey, V. C. (2012). MIS quarterly, 1165-1188.

7. The Business of Artificial Intelligence Brynjolfsson, E., & Mcafee, A. (2017). Harvard Business Review.

8. How The Digital Age Has Changed Marketing Channels Forever (https://www.forbes.com/sites/ajagrawal/2016/02/15/how-the-digital-age-has-changed-marketing-channels- forever/#4e8a7295680a)

9. The Amazing Ways Companies Use Virtual Reality For Business Success https://www.forbes.com/sites/bernardmarr/2017/07/31/the-amazing-ways companies-use-virtual-reality-for- business-success/#20cb3e

10. Internet of Things (IOT): A vision, architectural elements, and future directions Gubbi, J., Buyya, R., Marusic, S., & Palaniswami, M. (2013). Future generation computer systems, 29(7), 1645-1660.

11. Cloud computing—The business perspective. Marston, S., Li, Z., Bandyopadhyay, S., Zhang, J., & Ghalsasi, A. (2011). Decision support systems, 51(1), 176-189.

12. The Digital Transformation of Traditional Businesses (Andal-Ancion, A., Cartwright, P. A., & Yip, G. S. (2003). MIT Sloan Management Review, 44(4), 34)

13. Digital Transformation of Industries https://www.weforum.org/projects/digital-transformation-of-industries

14. Creative Disruption: The impact of emerging technologies on the creative economy http://www3.weforum.org/docs/39655_CREATI VE-DISRUPTION.pdf

15. What is Disruptive Innovation? https://hbr.org/2015/12/what-is-disruptive-innovation

16. Waking Up IBM: How a Gang of Unlikely Rebels Transformed Big Blue https://hbr.org/2000/07/waking-up-ibm-how-a-gang-of-unlikely-rebels-transformed-big-blue

17. How to navigate a digital transformation https://hbr.org/2016/06/how-to-navigate-a-digital- transformation

18. The Reflections of Digitalization at Organizational Level: Industry 4.0 in turkey Yüksel, A. N., & Sener, E. (2017). Journal of Business, Economics and Finance, 6(3), 291-300.

19. Birth of Industry 5.0: Making Sense of Big Data with Artificial Intelligence, "The Internet of Things" and Next-Generation Technology Policy Özdemir, V., & Hekim, N. (2018). Omics: a journal of integrative biology, 22(1), 65-76.

Course Web:
Lecture notes, assignments, discussions and announcements will be available on your course's SuCourse site.
Students will be notified and e-mailed about the uploaded materials on SuCourse. Lecture notes will be actively used and uploaded in SuCourse "Resources ".

Instructional Design:
The course is prepared as a lecture in form of seminar. This will necessitate each student to take responsibility for the achievement of the class. Through the course special importance is given on discussions and interaction with the students. This includes discussions concerning recent subjects in technology and innovation management. At the end of each session, students are expected to deliver suggestions on how emerging technologies and trends can influence established industries and analyze the disruption areas. Before each session, some selected articles will be shared and students are advised to read them in order to have a better understanding of that session's scope. Students will prepare a strategy presentation based on their own company needs. If the students do not have work experience, then they will select a company or an NGO to complete this exercise.

Grading:

Attendance &Participation	: 30%
Final Group Project	: 30%
Final Exam	: 40%

Requirements:
Attendance and Participation (30%): Attendance and class participation is an important aspect of this course. Being fully prepared and contributing to the class discussions is necessary for the successful achievement of the course objectives.
The students are advised to read the assigned articles mentioned in the course schedule and be ready to participate in the class discussions.
Final Group Project (30%): Students prepare and present a report on a business case for leveraging the emerging technologies applied to the student's selected company either a corporation, sports club, NGO, etc.
Final Exam (40%): A final exam will be held in the context of the topics covered throughout the course.

Academic Honesty:

Learning is enhanced through cooperation and as such you are encouraged to work in groups, ask for and give help freely in all appropriate settings. At the same time, as a matter of personal integrity, you should only represent your own work as yours. Any work that is submitted to be evaluated in this class should be an original piece of writing, presenting your ideas in your own words. Everything you borrow from books, articles, or web sites (including those in the syllabus) should be properly cited. Although you are encouraged to discuss your ideas with others (including your friends in the class), it is important that you do not share your writing (slides, MS Excel files, reports, etc.) with anyone. Using ideas, text and other intellectual property developed by someone else while claiming it is your original work is *plagiarism*. Copying from others or providing answers or information, written or oral, to others is *cheating*. Unauthorized help from another person or having someone else write one's paper or assignment is *collusion*. Cheating, plagiarism and collusion are serious offenses that could result in an F grade and disciplinary action. Please pay utmost attention to avoid such accusations.

Classroom policies and conduct

Sabancı MBA Program values participatory learning. Establishing the necessary social order for a participatory learning environment requires that we all:

- Come prepared to make helpful comments and ask questions that facilitate your own understanding and that of your classmates. This requires that you complete the assigned readings for each session before class starts.
- Listen to the person who has the floor.
- Come to class on time.

Course Schedule:

Week 1	Date:	October 6th - 7th, 2020
Topic:		Introduction to the Course
Requirements:		

Week 2	Date:	October 13th - 14th, 2020
Topic:		Introduction to Industry 4.0 & Digital Trx.
Requirements:		

Week 3	Date:	October 20th – 21st, 2020
Topic:		Introduction to Technology Trends and Digital Transformation - Visiting Speaker
Requirements:		

Week 4	Date:	**November 3rd - 4th, 2020**
Topic:		Importance of Customer Experience in Developing Business with New Technologies and a Leading Methodology in Customer Experience: Design Thinking
Requirements:		

Week 5	Date:	**November 10th – 11th, 2020**
Topic:		World's most valuable resource: Big Data and its increasing importance in business life & the commercialization process of an intelligence greater than a human being's intelligence - Artificial Intelligence – AI – Visiting Speaker from IBM
Requirements:		

Week 6	Date:	**November 17th - 18th, 2020**
Topic:		Changing dynamics of marketing and integrated digital marketing & AR/VR and areas of application
Requirements:		

Week 7	Date:	**November 24th - - 25th, 2020**
Topic:		IOT & Cloud Computing - Successful Implications: Visiting Speaker from Samsung
Requirements:		

Week 8	Date:	**December 1st – 2nd, 2020**
Topic:		Examples of Sectorial Digital Transformation: Visiting Lecturer
Requirements:		

Week 9	Date:	**December 8th – 9th, 2020**
Topic:		Technology-Enabled Disruptions
Requirements:		

Week 10	Date:	**December 15th – 16th, 2020**
Topic:		Internet Strategy Formulation
Requirements:		

Week 11	Date:	**December 22nd – 23rd, 2020**

Topic:		Digital Management and Leadership
Requirements:		
Week 12	**Date:**	**December 29th – 30th, 2020**
Topic:		Digital Transformation Around the World and in Turkey
Requirements:		
Week 13	**Date:**	**January 5th, 2021**
Topic:		Final - Project Presentations - Industry 5.0
Requirements:		
Week 14	**Date:**	**January 6th, 2021**
Topic:		Final - Project Presentations
Requirements:		