

MBA – Focusing on Entrepreneurship, Innovation & Technology Management

The Future of Technology (098815)

Minsemester 7 / 2023-24
Technion – Bloomfield 424
Fridays, 8:30-12:00

Teaching Staff: Gil Avivi, Kinneret Teodorescu
Instructor: Gil Avivi, Director of Corporate Strategy at Intel. gil.avivi@technion.ac.il
Academic instructor: Assoc. Prof. Kinneret Teodorescu. kinnerett@technion.ac.il
Office Hours: By appointment

Credits: 2 points

Course Goals and Description

Technology around us is ever-changing and our future is dependent on it. We will learn on the evolution of technology across several domains that impact the social and business environment. Each group of students will analyze one of the domains and prepare a recommendation for action.

Learning Outcomes

- Understand the potential evolution of the technology world and dive deeper into one of the domains at a level that enables to provide recommendation for action
- Develop business mindset and tools that participants can use throughout their career
- Gain hands-on experience at presenting an idea based on market research

Course Content/Topics (Domains in focus)

- Cloud
- Semiconductors
- Metaverse
- Connectivity
- Security & Privacy
- AI

Expertise to develop:

- Market Sizing
- Business models
- Market Analysis/Attractiveness
- Competitive Assessment
- Strategy development
- Financial Planning

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Assignments and Grading Procedures

- **Participation (10%)**
- **Evolution of the chosen domain in the next ~5-10 years (25%)**
 - Definition and players
 - Historical Perspective
 - Main trends and potential changes including accelerators, barriers and uncertainties (deep dive into each)
 - Cohesive view on potential evolution (Synthesis of all trends and potential changes)
- **Recommendation (25%)**
 - Based on the cohesive view the team has developed, it will identify an entity that should take certain actions due to the potential changes in the chosen domain. Entity can be a company (TSMC, Amazon, etc.), Government Entity, New Startup/Venture, etc.
 - What are the challenges/opportunities for this entity as it relates to the chosen domain
 - What specific actions should the entity take in the next five years and what is the ROI
- **Final Presentation (40%)**
 - Present the recommendation to a public audience at Tech&Talk Center in Matam

Course Schedule (Topics, assignments, Exams)

- **Week #1: Welcome and overview**
 - Course overview and expectations
 - Predicting the Future
 - Overview on the Future of Technology (focus on the domains for the course)
- **Week #2+3: Prepare evolution of the chosen domain in the next ~5-10 years**
- **Week #4: Review domain evolution in the next ~5-10 years**
 - Students to submit domain evolution presentation by Tuesday of week #4
 - Workshop on “Presentation Skills” as feedback for each review
- **Week #5: Prepare recommendation**
- **Week #6: Prepare final presentation**
 - Students to submit presentation on recommendation on Tuesday of week #6
- **Week #7: Review final presentation (focus on “Recommendation”)**
 - Students to submit final presentation on Tuesday of week #7
 - Class discussion on each presentation
- **Week #8: Present final work at Tech&Talk Center in Matam**
 - Presentations in Tech&Talk Center at **16:00-18:30 on Wednesday, 8.5.24**

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Course Requirements & Course Policies

Prepare the work early to get feedback on time. Group appointments with instructors requires group members to be prepared and ready to present their progress and questions. All group members are required to take an active part in the development process and in all presentations.

Accommodation for Students with special needs

Please contact the course staff to make sure we are aware of your needs so we can accommodate

Text book(s) and/or other materials

All materials will be learned in the class and developed by the students. The following can be helpful:

- 21 Lessons for the 21st Century, Yuval Noah Harari
- 2030 – How Today’s Biggest Trends Will Collide and Reshape The Future of Everything, Mauro F. Guillen
- The Future is Faster than You Think, Peter H. Diamandis and Steven Kotler
- What does it take to run a metaverse?, Jana Arbanas and Chris Arkenberg, Deloitte
- 2023 State of the Cloud Report, Flexera
- The AI Ethics Boom, Abhinav Raghunathan, OSDC
- The Impact of Artificial Intelligence - Widespread Job Losses, Calum McClelland
- Von Der Gracht, H. A. (2012). Consensus measurement in Delphi studies: review and implications for future quality assurance. *Technological forecasting and social change*, 79(8), 1525-1536.
- Dedehayir, O., & Steinert, M. (2016). The hype cycle model: A review and future directions. *Technological Forecasting and Social Change*, 108, 28-41.
- Song, C. H., Elvers, D., & Leker, J. (2017). Anticipation of converging technology areas—A refined approach for the identification of attractive fields of innovation. *Technological Forecasting and Social Change*, 116, 98-115.
- Jiang, R., Kleer, R., & Piller, F. T. (2017). Predicting the future of additive manufacturing: A Delphi study on economic and societal implications of 3D printing for 2030. *Technological Forecasting and Social Change*, 117, 84-97.
- San Kim, T., & Sohn, S. Y. (2020). Machine-learning-based deep semantic analysis approach for forecasting new technology convergence. *Technological Forecasting and Social Change*, 157, 120095.
- Christensen, Clayton M., Rory McDonald, Elizabeth J. Altman, and Jonathan E. Palmer. "Disruptive innovation: An intellectual history and directions for future research." *Journal of management studies* 55, no. 7 (2018): 1043-1078.
- Coccia, M., & Watts, J. (2020). A theory of the evolution of technology: Technological parasitism and the implications for innovation management. *Journal of Engineering and Technology Management*, 55, 101552.

Academic Integrity

Please maintain it



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AND DECISION SCIENCES**
MAKING SENSE OF IT



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Gil's note:

The pace of change in technology is enormous and understanding it is critical to almost any entity around us. While I started my career as a Hardware Engineer, my focus in the last ~20 years was on the business aspects of technology including Finance, Business Development, Product Management, and Strategy. I look forward to being your guide in this journey which will enable you to explore the potential evolution of technology in a specific domain. I'm excited to learn from you on your ideas for what needs to be done based on your analysis.