

FACULTY OF DATA AND DECISION SCIENCES MAKING SENSE OF IT



MBA - Focusing on Entrepreneurship, Innovation & Technology Management

COURSE TITLE: INNOVATION MANAGEMENT

Course Number: 099792		2.0 Credit points		_
Mini- Semester: 2,7	Year: 2025	Number of Day: weeks:7 Thursday 1		Time: 14:00-17:30 Room 214
<u>COURSE INSTRUCTOR:</u> PROF. MIRIAM EREZ				
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Course website:

SYLLABUS

COURSE GOAL and DESCRIPTION

This course focuses on managing the process of innovation in organizations along the six steps of the journey of the idea (See Figure below). We begin with the journey of the idea or the opportunity to solve a problem that has not yet been solved. We continue by learning how to generate creative ideas and how to choose the right idea for implementation. The next challenge is to get the support for implementation and the needed resources from the decision-makers. The last two phases in the journey are the implementation phase and getting to the market.

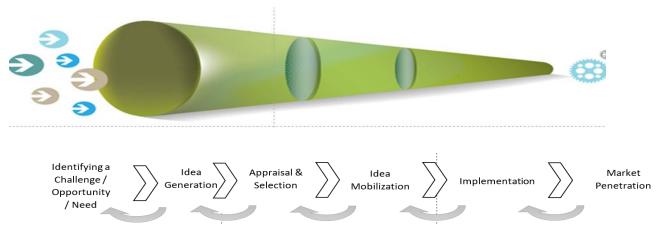




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Course Objectives:

This course aims to equip students with the knowledge and tools to effectively manage the innovation process within organizations. The objectives are:

- 1. **Knowledge Acquisition**: Learn a comprehensive methodology for managing innovation, from identifying challenges and opportunities to achieving market penetration. The course covers six critical stages, providing relevant tools and methods for each.
- Ecosystem and Leadership: Understand the vital role of the organizational ecosystem, structure, culture, and leadership in fostering innovation. Explore the leader's dilemma of balancing the risks of investing in innovation (exploration) versus optimizing current operations (exploitation).
- 3. **Implementation**: Tackle the challenges of introducing change from both management and employee perspectives. Students will practice using tools for each phase of the innovation process.

Learning Outcomes

By the end of this course, students will be able to:

- Manage Innovation Processes: Navigate the six steps of the innovation model within their organizations.
- Ideation Tools: Identify problems or opportunities, generate creative solutions, and evaluate alternatives.



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Communication and Implementation: Effectively communicate novel ideas, overcome resistance to change, and manage the implementation and market penetration stages.

Content & Scope

The course includes lectures, case studies, and practical exercises. Each class focuses on a specific phase of the innovation process, ensuring a detailed understanding of each stage.

Teaching Materials

Materials include class lectures, readings, discussions, exercises, and guest speaker sessions. All essential materials (excluding recommended books) will be available on the course Moodle.

Assignments and Grading

- 1. Class Attendance: Attend at least 6 out of 7 sessions.
- 2. Active Participation (10%): Engage with course materials, participate in discussions, and share with the class additional material relevant to the course content.
- 3. Final Team Project (70%): Develop a comprehensive PowerPoint presentation covering the six parts of the innovation process, plus integration. Consider implementing your project in your work context.
 - > Mid-Course Submission: Submit the first three parts of ideation by 23/01/2025. Feedback will be provided on the ideation phase.
 - 4. Individual Assignment (10%) by 29/01/2025
 - 5 Final Presentation (10%): Present the team project on 06/02/2025. (10-minute presentation + 2 minutes Q&A).
 - Submission of Final Project between 06/02/2025 13/02/2025.

Recommended readings

1. דדי פרלמוטר, מוליכים להצלחה. 2021



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https://ezlibrary.technion.ac.il/login?url=https://kotar.cet.ac.il/KotarApp/Viewer.aspx?nBookID=112 138978#6.942.6.default

 Safi Bahcall Loonshots (2019). How to Nurture the Crazy Ideas That Win Wars, Cure Diseases, and Transform Industries.
<u>בעברית: ספי בקל. הבלחות.</u> איך לטפה רעיונות פורצי דרך_שמרפאים מחלות, מנצחים במלחמות ומשנים תעשיות

https://ezlibrary.technion.ac.il/login?url=https://kotar.cet.ac.il/KotarApp/Viewer.aspx?nBookID= 108678313#

- Vijay Govindarajan (2016). The three-box solution: A strategy for leading innovation. Boston: Mass: Harvard Business Review Press. (see on Moodle a summary and a video) <u>https://www.youtube.com/watch?v=wgD2VzFqCaE</u>
- 4. Nathan Furr & Jeff Dyer (2014). The Innovator's Method: bringing the lean startup into your organization. Boston Mass. Harvard Business Review Press. (see Ch. 1 on Moodle)
- 5 Ethan Mollick. (2024) Co-Intelligence: How to Live and Work with AI

https://knowledge.wharton.upenn.edu/article/co-intelligence-how-to-live-and-work-with-ai/

Course outlines:

Lesson 1 (02/01/2025): Introduction to Innovation and Its Strategic Importance Topics:

- **a.** Definition and types of innovation (incremental, disruptive, radical, and architectural)
- b. Importance of innovation in business strategy
- c. The Process of Innovation
- d. The first phase of Problem Identification

Class Exercise: Challenge/problem/opportunity Identification, the Fishbone Tool.

Learning Outcomes:

- > Understand what innovation is and why it matters.
- > Identify the role of innovation in achieving competitive advantage.





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Identify challenges and opportunities that need innovative solutions \geq

Readings:

• Christensen, C.; Raynor, M.E. & McDonald, R. What is disruptive innovation? (Dec. 2015). Harvard Business Review. https://hbr.org/2015/12/what-is-disruptive-innovation

2021. דדי פרלמוטר. מובילים להצלחה. משכל, ידיעות אחרונות.

Recommended

- Sawhney, M., Wolcott, R., and Arroniz, I. (2006). The 12 Different Ways for Companies to Innovate, *MIT Sloan Management Review*, 47 (3) p.75-82.
- Simon Sinek (2009). Start with Why. How great leaders inspire everyone to take action. NY: Portfolio, Penguin. Video: http://www.youtube.com/watch?v=l5Tw0PGcyN0

For the team project part 1: As a team, select one organization/business for which you would like to develop an innovation project. Consider the main challenges faced by the organization, using the Fishbone methodology that you practiced in class, and come up with a challenge or a problem that you want to solve or an opportunity that you want to promote.

- Describe the challenge/opportunity/problem
- Analyze the causes for it, using the fishbone diagram. ٠

Lesson 2 (09/01/2025). The ideation phase: Individuals' and teams' creative idea generation

- The creative process a.
- The Knowledge base for innovative idea generation b.
- Generating creative ideas as an individual c.
- Generating creative ideas as a team d.

Learning Outcomes:

- Recognize types of divergent and convergent cognitive processes. \geq
- Identify the role of innovation in achieving competitive advantage. \geq
- Identify challenges and opportunities that need innovative solutions \triangleright



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Class Exercise: Idea generation - a brainstorming exercise and other tools. Criteria for selecting one idea for implementation as the solution to the problem, versus other ideas. *Reading:*

- Amabile, T. (2012). Componential Theory of Creativity (2012) HBS Working Paper, 12-096.
- Dyer, J., Gregersen, H., and Christensen, C. 2009. The Innovator's DNA, *Harvard Business Review*, 87 (12), p. 60-67
- Erez, Lisak & Harush (Ch. 9, 2019). In: Michael D. Mumford and E. Michelle Todd (Editors) (2019). Creativity and Innovation in Organizations (SIOP Organizational Frontiers Series) 1st Edition. Taylor & Francis

For the team project Part 2: For your team's challenge/problem/opportunity, generate novel ideas, state all of them, and suggest three potential ideas for implementation by order of preferences, with #1 as the most preferred idea, and explain why you chose the specific idea for a solution versus other ideas, using the tools and criteria learned in class.

Lesson 3 (16/01/2025): Solution validation

- a. Idea verification for implementation evaluation tools
- b. Design Thinking: Methods and tools for idea validation.

Learning Outcomes:

- Learn to use tools for assessing the relative value added of the three alternative ideas for a solution
- > Learn to use the Empathy Map for interviewing potential users.
- > Learn to Pivot and change the proposed solution accordingly

Class exercise: Practicing the Design Thinking method.

Reading:

• Brown, T. (2008) Design Thinking, Harvard Business Review, 2008

For the team project Part 3: Validate your solution by observing and talking to potential users. Reshape your solution based on the empathy map.





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Submission of the first three parts by 23/01/2025

Lesson 4 (23/01/2025): The organization eco-system: Leadership and organizational culture for innovation

- a. What is culture, what is an organizational culture and how to measure it?
- b. Building a culture that supports creativity and risk-taking
- c. Leadership's roles in fostering innovation
- d. The Ambidextrous Leadership Behavior

Learning Outcomes:

- > Learn to cultivate an organizational culture that values innovation.
- > Understand leadership roles, strategies and communicating messages for promoting creativity.

<u>Class Exercise</u>: As a team consider the organizational culture you want to create for implementing your potential solution. Consider and describe current practices you plan to keep, practices, that you need to change, and new practices that you plan to implement.

Reading:

- Isaacson, W. The real leadership lessons of Steve Jobs. *Harvard Business Review*, June 2012. Recommended:
- Miron, E., Erez, M., Nave, E., 2004. Do Personal Characteristics and Cultural Values that Promote Innovation, Quality, and Efficiency Compete or Complement Each Other? *Journal of Organizational Behavior*, 25, p. 175-199.

<u>Individual assignment part 4:</u> Use the Organizational Culture Assessment Tool to evaluate your work organization culture. 1. Portray it on the graph.2. Write an evaluation and a recommendation for modifying your Organization/Unit culture.

Submission of Individual Assignment Part, 4, 29/01/2025







Lessons 5 (30/01/2025): overcoming resistance to change

- a. Sources of Resistance to change
- b. Getting to "yes" when implementing innovation (Processes, Products, Services).
- c. Methods for overcoming resistance and their underlying theory
 - Kurt Lewin Top-down
 - Kotter Top-down
 - Lauche & Erez Bottom-Up change initiation

Learning Outcomes:

- > Understand the sources of resistance to change
- > Strategies for overcoming resistance to change
- Learning methods for getting to "yes".

Class Exercise: Use of Kotter's tool for overcoming resistance to change.

Reading:

• Cialdini, R.B. (2001). Harnessing the Science of Persuasion. *Harvard Business Review*, 72-79.

Recommended:

- Dutton, J., Ashford, S., O'Neil, R., & Lawrence, K. (2001). Moves that matter: Issue selling and organizational change. *Academy of Management Journal*, 44 (4), 716-736.
- Lauche, K. & Erez, M. (2023). How innovators negotiate resources: Relational dynamics of issue selling and collective moaning. *Academy of Management Journal*, 66(2), 553–577.

For the team project part 5: Identify sources of support and obstacles for implementing innovative solutions and propose a program for overcoming the barriers to implementing your innovation.





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Lesson 6 (06/02/2025): Integrating external knowledge of startup acquisition.

- a. Structural Integration: learning the pros and cons- of high versus low structural integration when acquiring external knowledge via startup acquisition.
- b. Methodologies for overcoming the challenges of external knowledge assimilation.
- c. Market penetration and getting to the end customer.
- d. Assessing the impact of innovation

Learning Outcomes:

- > Understand the challenge of external knowledge integration
- > Getting familiar with potential methodologies for structural integration
- > Learn to use metrics for assessing the impact of innovation
- > Learn to optimize the "last mile" of getting to the end customer.

Class exercise: Class Discussion of different forms of Structural Integration of an acquired startup. Motivation for the acquisition, the pros and cons- of structural integration, and how to optimize it for successful integration.

Readings:

Puranam, P., Singh, H., & Zollo, M. (2006). Organizing for innovation: Managing the coordinationautonomy dilemma in technology acquisitions. *Academy of Management Journal*, 49(2), 263-280.

Stettner, U., & Lavie, D. (2014). Ambidexterity under scrutiny: Exploration and exploitation via internal organization, alliances, and acquisitions. Strategic Management Journal, 35(13), 1903-1929.

For the team project part 6: Two alternatives:

A. Prepare "the last mile" of getting to the user and offering a unique user experience and added value.

B. Propose a structural integration process for bringing in external knowledge and integrating it with the organizational goals for future developments and new innovative products.

Class 7 (13/02/2025): Presentation of the final team project.

<u>10 minutes per team + 2min.</u> Q&As.

Submission between 06-02-2025 to 13-02-2025
