

Market Opportunities for Innovative Technologies

Course Number: 99793

Mini-Semester 7 of the Academic Year 2022/23

Thursdays, 14:00-17:45

Bloomfield 527

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Meeting time for students: by appointment

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Meeting times for students: by appointment

Prerequisites: None

Credits: 2 points

Estimated study hours per week: 3.5 in class + 2-3 hours at home

Course Goals and Description

The choice of market opportunities for a new technology is one of the most challenging tasks for innovators and entrepreneurs, yet one of the most profound decisions in the commercialization effort.



In this hands-on course, we will learn how to discover the most valuable market opportunities and find out where to focus.

The goal of this course is threefold:

- (1) to understand the process of market opportunity identification and evaluation in the context of new technologies;
- (2) to acquire a practical business tool (the Market Opportunity Navigator) for identifying, evaluating and prioritizing market opportunities for a core technology;
- (3) to apply this know-how on a real invention, and gain hands-on experience in this critical choice.

Learning Outcomes

At the end of the course the student will be able to:

- 1. Identify different applications and customers for innovative technologies
- 2. Evaluate the value creation potential of a market opportunity
- 3. Evaluate the challenges in capturing value for each market opportunity
- 4. Set a promising strategic focus
- 5. Balance focus and flexibility in new ventures
- 6. Understand the complementing nature of the 'Market Opportunity Navigator' to other well-known business tools

Course Content/Topics

The course addresses one of the most profound decisions in new venture creation: the choice of which market(s) to focus on. Students will learn how to identify, evaluate and prioritize market opportunities, stemming from the unique abilities or technological competencies of the venture, to get the most out of their innovation.



The course is based on a novel business tool - the "Market Opportunity Navigator" - an easy to apply framework, covering the three essential steps for setting a winning strategy:

Step 1- Generating a Market Opportunity Set:

How to search systematically and broadly for market opportunities in order to create a varied set of options.

Step 2- Creating an Attractiveness Map:

How to evaluate different market opportunities and compare their attractiveness in a systematic, unbiased manner.

Step 3- Designing an Agile Focus Strategy:

How to build a strategy that focuses on the most attractive market and at the same time avoids lock-in and nurtures agility.

This framework adds a highly critical component to other popular business tools such as the "Business Model Canvas" or the "Lean Start-up".

During the entire course, students will work in teams on developing a market opportunity strategy for a real startup, following the three steps of the Navigator.

Assignments and Grading Procedures

The course grade will be based on the following:

- 1) Class participation: attendance in 6 out of the 7 class sessions, preparation for class and participation in class discussions and group work 10%
- 2) Mid-term presentation, on meeting 5 (26/1/23). Detailed instructions will be given separately- 25% (all team members must attend the presentation)
- 3) Final presentation, on meeting 7 (9/2/23). Detailed instructions will be given separately-25% (all team members must attend the presentation)
- 4) Final report, to be submitted by 23/2/23. Detailed instructions will be given separately-40%



Course Schedule

| Date | Content | Recommended reading/ viewing |
|----------|--|--|
| 29.12.22 | Course Overview The challenges of linking technologies to markets Market Opportunity Navigator – overview Technology presentation | Where to Play/ Gruber and Tal, Part 1 (download here) The Market Opportunity Navigatorshort overview video Stop playing target market roulette – A new addition to the Lean toolset/Steve Blank Dyer, J., Gergersen, H. & Christensen, C The Innovators' DNA. Harvard Business Review, 2009 |
| 5.1.23 | Opportunity identification: delinking and re-linking (Worksheet 1) Group work on Worksheet 1 Conducting customers interviews | Where to Play/ Gruber and Tal, Part 2.1 The Mom test |
| 12.1.23 | Group presentations & discussion: Worksheet 1 and Market Opportunity Set Evaluating market opportunities: Potential and Challenge (Worksheet 2) | Where to Play/ Gruber and Tal, Part 2.2 Aulet, B. 2013. Disciplined entrepreneurship: 24 steps to a successful startup. Step 1, Step 2 Mullins, J. 2006. The new business road test: What entrepreneurs and executives should do before writing a business plan. Chapter 1: 3-23 |
| 19.1.23 | Guest lecturer Coaching session and group work on Worksheet 2 & the Attractiveness Map | |
| 26.1.23 | Mid-term presentations: Market Opportunity evaluation and the Attractiveness Map The Agile focus strategy (worksheet 3) | Where to Play/ Gruber and Tal, Part 2.3 Beinhocker, E., 1999. Robust adaptive strategies. MIT Sloan Management Review |



| 2.2.23 | The Navigator in concert with | Business Model Generation: A |
|--------|---|---------------------------------------|
| | the Business Model Canvas, the | Handbook for Visionaries, Game |
| | Value Proposition Canvas, and | Changers and challengers |
| | the Lean Startup Method | (Osterwalder, A. & Pigneur, Y. 2010). |
| | Adaptations for social ventures | Part 1, 14-51. |
| | Group work on final | Reis, E., 2011.The Lean startup |
| | presentation | methodology. |
| | | The customer development process |
| 9.2.23 | Final presentations: the | |
| | Primary Market Opportunity | |
| | and Agile Focus strategy | |
| | Main takeaways and course | |
| | wrap-up | |

Course Requirements & Course Policies

This course will combine several teaching methods:

- Class lectures will present applicable business tools with detailed explanations on how to apply them, along with numerous examples and cases.
- You will work in groups on a new venture proposal, i.e. generate ideas for market applications, identify problems, analyze and evaluate alternatives, to develop a promising strategy for a specific technology. Thereby you will be able to experience the early stages of new venture creation at first hand.
- An important part of this class is peer learning: you will not only see the progress your project is making, but also observe and learn from other projects.

Accommodation for Students with special needs

Please inform the teaching staff if you have any special needs, and we will find the way to assist you.

Text book(s) and/or other materials

Where to Play: 3 steps for discovering your most valuable market opportunities/ Gruber and Tal, Pearson Financial Times.

The recommended reading / viewing for each session is described in the above table