

## **A CLOSE LOOK AT THE STARTUP NATION – B8693**

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*"Experts are people of the past – for the future we need visioners."*

– Shimon Peres, 1923-2016

### **Course Overview:**

Israel is rated as #1 in the rate of per capita R&D spending globally; #1 in the number of startups outside Silicon Valley; and #1 in per capita VC investments. There are more Israeli companies listed on the NASDAQ than India, Japan and Korea combined.

How has Israel become such a powerhouse of innovation and creativity? What elements of Israel's history and society made this possible? What is the "secret sauce" of the Israeli startups? What are the key elements of the innovation management in the Israeli ecosystem, how it is different from the more common innovation management? How can it be used by managers from different countries and cultures?

Even during the recent COVID-19 era, startups from the Israeli entrepreneurship ecosystem has showed agility and innovation, adapting their business models and product value proposition to the new reality, enhancing indoor, remote collaboration aspects over face-to-face interaction aspects. As part of the remote industry guest lectures, students will be able to hear first-hand how companies adapted to the new reality, and how for some the crisis became a blessing in disguise.

The course provides a core academic grounding of some of the innovation methodologies used by leading entrepreneurs at Israel's blazing hi-tech economy. This course combines (Zoom) in-class lectures with online talks by some of the country's top companies (such as Mobileye, Riskified, Via Transportation, Lemonade, Waze, SiSense, AppsFlyer, Our Crowd, FundBox, MinuteMedia, Yotpo, SimilarWeb, MyHeritage, Monday, and Nexar). Lectures are led by IDC's Professors together with prominent figures from the Israeli innovation scene, including entrepreneurs; top angle investors; leaders of corporate innovation; and representatives of governmental entrepreneurship agencies. This combination of academic expertise mixed with streetwise proven experience of industry leaders is the heart of the program.

**Course objectives:**

- Students will understand key methodologies of early-stage startups, including Need Identification and Need Validation Strategies that merge methodologies from User-centered Design with Lean Startup best practices.
- Students will learn different methodologies for ideation, with special focus on Solution Validation Strategies, based on methodologies from the Service Design disciplines.
- Students will understand how the field of UX (User Experience) methodologies became instrumental to product innovation
- Students will learn how UX Research techniques are used by entrepreneurs and product managers in an agile environment
- Students will be introduced to the Start-up Nation culture and how to work with Israeli hi-tech industry as a resource in developing innovative products and services.
- Student will understand the unique strategies of technology-based innovation such as short-term planning (vs. long), the importance of “followship” instead of leadership, the role of flat hierarchy and direct speech in a successful startup culture.
- They will also learn creativity tools like the closed world principle, the function follows form, adding dimensionality, contradiction and forecasting matrix.
- A crisis is often a blessing in disguise – students will learn how to take advantage of crisis and make them opportunities. Students will hear from founders and entrepreneurs how the Israeli culture is relevant and has contributed to their ability to adapt to the new COVID-19 reality.

**Content:**

The course is a collaboration between Columbia University Business School and IDC's Arison School of Business and is designed for Columbia MBA students together with up to 30 outstanding Inter-disciplinary center (IDC) MBA students who already take an active role in the Israeli innovation ecosystem. The students will work in mixed teams to facilitate cultural exchanges and allow the student from Columbia to experience the Israeli startup culture during hands on exercises.

The course will take place over 6 weeks, one session per week, **over Zoom**. Each session is 3 academic hours, and will merge academic content with industry case studies and guest lectures. Students will be exposed to various aspects of the way innovation is initiated and managed in Israel with an emphasis on the characteristics of the "start-up nation" management style.

The course consists of two main components:

- 1) **Academic classes** by Professor Jacob Goldenberg and Dr. Oren Zuckerman - Professor Jacob Goldenberg is a marketing professor at IDC and a visiting professor at Columbia Business School, and Dr. Oren Zuckerman is the founder of IDC's Media Innovation Lab and the Academic Director of the Innovation & Entrepreneurship Global MBA track. The lectures will explore various aspects of innovation, entrepreneurship, and value creation. Specific topics include: technology-based revolution, the importance of short-term planning, how to master change before it masters you with an emphasis on the impact of the Covid-19 outbreak on the Israeli innovation ecosystem, value creation through need identification and need validation strategies, solution validation strategies, contradiction as a first sign of innovation, resistance to innovation, and specific use cases of technology innovation: from mobiles to Internet of Things.
  
- 2) **Talks by Israeli industry leaders** - including angel investors, VC's, and serial entrepreneurs. Covering topics such as Israel's unique models for innovation, how a culture of innovation can be built and nurtured, emerging trends within the Israeli entrepreneurship ecosystem, and investors' perspective on the Israeli technology market in times of crisis.  
Students will interact with leading figures from successful companies and startup accelerators, who will share the "behind the scenes" of Israeli innovation. The talks will include well-known companies such as Mobileye, Riskified, Via

Transportation, Lemonade, Waze, SiSense, AppsFlyer, Our Crowd, FundBox, MinuteMedia, Yotpo, SimilarWeb, MyHeritage, Monday, Nexar, and more...

Each session in the course will include 1-2 academic hours of academic lecture followed by 1-2 academic hours of talks by industry leaders.

### **Assignments:**

There will be three assignments.

1. Attribute Dependency, Individual Assignment – This exercise focused on the creativity templates covered during the class sessions. The assignment is due on the last date of the course. This is a type B assignment.
2. Startup Assessment, Individual assignment – In this assignment students will analyze one of the startups presented in the course, according to section 4 of the “Guidelines for the Startup Assessment assignment”. Use online resources to deepen your analysis, do not base your assessment only on the startup guest lecture. This is an individual assignment, to be submitted one week after end of course. Note the requirement for this assignment is assessment of section 4 only in the guidelines, no need to analyze the other sections. This is a type B assignment.
3. Startup Assessment Group Assignment – The assignment will be done in teams of up to 6 students (combining student from both CBS and IDC) based on an online database of Israeli startups that will be introduced in the course. Each team is required to analyze a specific sector in the Israeli startup ecosystem and submit a detailed "investment opportunity" report. Students will work on the assignments during the course's six-week period. The assignment's due date is one week after the course's end date. This is a type A assignment.

***Guidelines for the Attribute Dependency assignment*** (to be completed during the six weeks period, submission due on the last day of the course):

Innovate using the Attribute Dependency and the Forecasting Matrix (use the Omnivati software that will be introduced in class).

Based on the class on Attribute dependency analyze one of the startups that were presented.

- 1) Choose one startup – explain your choice of preference (why did you decide to work on this topic).
- 2) Sign up for the Omnivati platform (get started page and a tutorial video will be available on Canvas, the platform will be presented also in class).
- 3) Using the platform create a forecasting matrix that consists of at least 6 internal attributes and at least 5 of external attributes.
- 4) Generate at least 4 new ideas, and at least one idea you recommend the company to adopt.
- 5) Generate a report of the analysis through the platform.
- 6) Explain briefly why the firm should adopt the one idea you selected. What is the value it offers and what are the main challenges?

**Guidelines for the Startup Assessment assignment** (to be completed during the six weeks period, submission due one week after end of course):

1. Analyze a specific sector in the Israeli startup ecosystem.
2. Select a "sub-sector" of startups using multiple tags, aim for search results of 5-10 companies (such as IoT, seniors, artificial intelligence, etc.). Within that "sub-sector", do the research, and select one startup as your group's "investment candidate".
3. Explain in details:
  - a. Why you chose that "sub-sector" (general market overview/analysis, why you think this sector is interesting)?
  - b. How many startups are within that sector?
  - c. How do you classify those startups, according to what parameters?
  - d. How do you analyze the relevancy of the sub-sector in light of the new COVID-19 reality?
4. Choose your leading startup as candidate for investment, and provide relevant background info on the following points. The depth of info you provide should be concise yet it must provide a deep-enough perspective on the company to allow the reader to reach an initial understanding of the startups strengths and weaknesses.
  - a. The founding team
  - b. The product
  - c. The technology
  - d. The funding stage

5. Analyze the competition and define the startup's differentiation:
  - a. What are the similarities and differences in product value proposition?
  - b. What are the similarities and differences in market definition?
  - c. What are the similarities and differences in the go to market strategy?
  - d. Have you identified an unfair/competitive advantage?
  - e. What are the details of investments in the main competitors?
  - f. Sources for potential resistance and potential solutions
6. Your report final conclusion: what are the top arguments supporting investment in this startup? How do you analyze the relevancy of the this specific startup in light of the new COVID-19 reality?

### **Grading:**

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| • Class attendance and participation                    | 30% |
| • Individual assignment - Attribute Dependency          | 15% |
| • Individual assignment – Presenting Startup Assessment | 15% |
| • Group assignment – New Startup Assessment             | 40% |

### **Participation**

Class attendance and participation – much of the learning will occur in the course of the discussions in class. Full and on-time attendance in all classes is mandatory in order to receive credit for class participation.

### **Required Readings:**

1. Suggested reading before course: Senor Dan and Saul Singer, (2011), Start-up Nation: The Story of Israel's Economic Miracle. Twelve; Reprint edition
3. Creative connections:  
<https://www.thecasecentre.org/main/products/view?id=146049>
4. Less is More: <https://www.thecasecentre.org/main/products/view?id=139155>
5. New product innovation 1: <https://www.designcouncil.org.uk/news-opinion/design-process-what-double-diamond>

6. <https://www.nngroup.com/articles/persona/>
7. <https://www.nngroup.com/videos/personas/>
8. About wireflows: <https://www.nngroup.com/articles/wireflows/>
9. Don Norman, *The Design of Everyday Things* (revisited), chapter 1

**Recommended Readings:**

1. Go Forth and Multiply - Unlocking Successful Innovation:  
<https://www8.gsb.columbia.edu/caseworks/node/688>
2. Tomer Sharon, *Validating Product Ideas*, Chapter 2