

Lessons from Israeli Innovation  
A joint Wharton – Coller Program  
Global Modular Course (MGMT 897)  
December 31, 2017 – January 3, 2018

Instructors & Staff

- **Prof David Hsu** – Wharton, dhsu@wharton.upenn.edu
- **Prof David Zvilichovsky** – Coller – TAU, davidz@tau.ac.il
- **Gleb Chuvpilo** – Venture Capitalist & Wharton Teaching Assistant, chuvpilo@gmail.com
- **Oran Barkai** – Wharton - Teaching Assistant, obarkai@wharton.upenn.edu
- **Ortal Shtayman** – TAU – Teaching Assistant, ortalby@gmail.com

Module Overview

*“ Israel is, by many measures, the country (relative to its population) that has done the most to contribute to the technology revolution “ Bill Gates*

Individuals, organizations and countries survive, adopt, improve, grow and sustain through innovation in many guises. Israel a country of just over 8 million people has been investing in research and development (as a % of GDP) more than any other nation on the globe. Israel, in many ways a true entrepreneurial venture in its own right, supports the creation of hundreds of new startups every year. It is a country where the heavy burden of security financing and a challenging environment encouraged rather than stiffened innovation. It is also a country where the availability of venture capital, measured per capita, is highest in the world.

Evaluating the recipe, which created this startup nation, is an ongoing task. Some feel that part of the magic incorporates a disobedient culture, where thinking out of the box and not doing exactly what you are told are common practices, this despite the institution of mandatory military service in the country. Notwithstanding such a culture trait, much of Israel’s success is also attributed to government policies and smart interventions which supported and continue to actively support innovation and investment in technology and R&D.

In this course, you will garner experience and expand your knowledge regarding innovation in the context of Israel and Israeli companies. The course will facilitate interaction with Israeli companies, entrepreneurs and investors. You will also be immersed in a project which addresses current, real world questions at the heart of technology innovation in both an Israeli and global context.

Agenda & Process

As part of the program, you will get a chance to connect and work with an Israeli technology company on an actual business issue and take home first-hand insights into the process of building a global technology business.

In late November, you will form teams of ~5-6, matched with one of the companies that kindly agreed to participate in our class. Once assigned to a company, you will start researching the company and its industry and interact with the company executives.

Following the kick-off calls and initial research, your teams will select research questions and submit a 2-page project description.

Teams will continue to work together and further interact with their target company when all participants gather at Tel-Aviv university for our 4-day intensive course.

During the course, we will also conduct interactive sessions to explore the various aspects of the Israeli high-tech ecosystem. We will have in-class presentations given by Industry leaders, founders of innovative companies, angels and venture capital investors and researchers. We will also participate in several company site visits.

On the last day of the course, your teams will be asked to make a short class presentation, succinctly describing the company you are working with, the question/issue being addressed, your early findings, and preliminary recommendations.

Each team will be allocated 15 minutes (including the Q&A and discussion, so plan for your presentation to be around 8-9 minutes).

After the course, your team will submit a report describing the company and its market, the question being addressed, the analysis performed and the team's final assessment and recommendations.

## Timeline

- **November 27<sup>th</sup>- December 7<sup>th</sup>:** Schedule a team conference call, receive additional information from the company and or collect information from open sources. Initiate background research on the selected company and its market, hold the kick-off conference call with your company, and submit on Canvas a short update on your project (2-3 sentences that describes the question you're trying to answer).
- **December 7<sup>th</sup>- December 24<sup>th</sup>:** Continue working on your project remotely; touch base with the assigned company as necessary, prepare a preliminary version of your in-class presentation.
- **December 24<sup>th</sup>:** Submit a two-page project overview. The overview should include:

- a brief background on the industry
  - an introduction to the company's business and overall strategy
  - a description of the issue you are tackling, and why you think this is an important question for the company at this stage
  - a brief action plan/description which covers the sources that have served/will serve you in studying the issue and providing a recommendation
  - summary of your interim findings
- **December 31<sup>st</sup>**: Working lunch for teams to meet in person for the first time.
  - **January 1<sup>st</sup>**: Get together for an in-person session with your startup, at the company's office in Israel. The companies already blocked time on January 1<sup>st</sup>, 2018, after 1pm (Israel Time), note that **you are responsible to finalize the exact time of the meeting, well ahead.** On the afternoon of January 1<sup>st</sup> we have allocated all afternoon and evening for the teams to work independently on the project and presentation.
  - **January 2<sup>nd</sup>**: Site visits to innovative Israeli technology companies and the Weizman Institute
  - **January 1<sup>st</sup> -3<sup>rd</sup>**: Incorporate the feedback you've received from the company, refine your analysis and present your findings to your classmates (8-9 minute presentation on January 3<sup>rd</sup>, followed by short Q&A / discussion.)
  - **January 21<sup>st</sup>**: Submit the course write-up (max 4000 words);

### Recommended Background Readings

Most readings are available via Canvas:

- The Israeli economy: Trends and Outlook Q3 2017 – Presentation by the office of the chief economist – Ministry of the Economy Israel.
- Bank Of Israel 2017 Data – Presentation by BOI Governor
- IVC – Israel - High tech exit reports H1 – 2017 and Q3-2017 Capital raising Survey
- EntrepreneurshipataGlance2017- Venture Capital Investments
- Venture Pulse report Q3- 2017
- Israeli R&D Incentive programs – overview by the OCS – Office of the chief scientist of the ministry of economy – Israel
- Senor, Dan and Singer, Saul. Start-up Nation: The Story of Israel's Economic Miracle. Twelve, New York, 2009.
- M. Porter and S. Stern (2001), Innovation: Location Matters, MIT Sloan Management Review, pp. 28-36, Summer 2001.
- Location Choice for New Ventures: Cities" Harvard Business School Note 9-811-106.
- G. Moore (1999), Crossing the Chasm, Harper Business Press. Chapters 1 and 2.

- D. Teece (2000), "Market Entry Strategies for Innovators: Avoiding Pyrrhic Victories," in *Managing Intellectual Capital*, Oxford University Press, pp. 91-113.
- JS. Gans and S. Stern, "The product market and the market for 'ideas': commercialization strategies for technology entrepreneurs," *Research Policy*, 2003.
- M. Marx and DH. Hsu, "Strategic 'switchbacks: dynamic commercialization strategies for technology entrepreneurs," *Research Policy*, 2015.
- A Special Report on Entrepreneurship, *The Economist*, 2009
- Skim Harvard Business School cases and Collier School cases, provided on the Canvas site for firm level background material.

### Course Evaluation

- Attendance - 10%
- Participation - 20%
- In class Group Presentation – 30%
- Written Group Assignment - 40%

## Instructor Biographies

**David Hsu** is the Richard A. Sapp Professor of Management at the Wharton School, University of Pennsylvania. He holds degrees from Stanford (A.B. in economics and political science), Harvard (master's in public policy), and MIT (Ph.D. in management). Hsu's research interests are in entrepreneurial innovation and management. Within that domain, he has investigated topics such as intellectual property management, start-up innovation, technology commercialization strategy, and venture capital. His research has appeared in leading journals in management and economics. He is past associate and department editor of *Management Science* and is currently an associate editor at *Strategic Management Journal* and on the editorial board at the *Journal of Business Venturing*. At Wharton, he teaches graduate courses in the domains of entrepreneurship and strategy.

**David Zvilichovsky** is a senior faculty member at the Tel Aviv University – Coller School of Management. He holds a Ph.D. in Economics as well as an MSc. in Computer Sciences from the Tel Aviv University and a Bsc. in Computer Sciences, Mathematics and Economics from the Hebrew University of Jerusalem. Zvilichovsky has been involved with the Israeli High Tech industry for over 20 years. He started his career as a software developer for Eshed Robotec and later became the company's head of R&D. David worked with and consulted to some of Israel's leading technology companies including Comverse, Scitex and Electric Fuel. He co-founded IPHighway, a pioneer in the Network QOS space and has been active in numerous financing and M&A transactions pertaining to technology startups including the sale of Ad4Ever to aQuantive (now Microsoft). Over the years David has also been active as a board member and advisor in the areas of Venture Capital, Technology Innovation and Early Stage Ventures and served as a special economic advisor to the national economic council at the Israeli prime minister's office. Dr. Zvilichovsky teaches courses in economics, entrepreneurship, and innovation. His current research interests include: Entrepreneurship, Venture Financing, Crowdfunding, Innovation Strategy, Adoption Externalities and the Internet Economy.

## Support Faculty

**Ziv Katalan** is Managing Director for Wharton Global Initiatives and an Adjunct Professor of Operations, Information and Decisions. He received his BS in Mathematics from Tel-Aviv University (1987), and his PhD in Management Science/Operations Research from Columbia University (1995). Since 1994, Dr. Katalan has taught courses in decision models and uncertainty, business analytics, operations management, supply chain management, mathematical modeling and its applications in finance, and quantitative finance at Wharton's MBA and MBA for Executives programs and Penn's EMTM program. He received a number of teaching awards from the Wharton MBA and MBA for Executives programs. During 2002-2007, Dr. Katalan served as Co-Director of the Executive Master's in Technology Management (EMTM), a program jointly sponsored by the University of Pennsylvania's School of Engineering and the Wharton School. Dr. Katalan's research interests include the design and analysis of production and service systems, and their interface with a company's marketing strategy,

scheduling and allocation of resources, and the impact of increasing product variety on manufacturing performance. His research papers were published in *Queuing Systems*, *Management Science*, *Operations Research*, and *Naval Research Logistics*.

### Teaching Assistants

**Oran Barkai** is a second-year MBA student at Wharton. Oran holds a double major bachelor degree in Law and Economic from Tel Aviv University. Following his studies, Oran worked at the Hi-Tech department of Naschitz, Brandes, Amir, & Co., a leading Israeli law firm. Later he joined The Boston Consulting Group Tel Aviv office as a management consultant where he worked closely with financial institutions, industrial companies and Hi-Tech companies. This Summer, Oran joined Onex Partners' investment team, a large-cap global Private Equity fund. Prior to his Academic studies, Oran served for six years as an officer in the Israeli Navy.

**Gleb Chuvpilo** is an investor in Artificial Intelligence & Robotics with a Master's degree from the MIT Computer Science and Artificial Intelligence Lab and an MBA in Finance and Strategic Management from The Wharton School at the University of Pennsylvania. Before becoming a venture capitalist, Gleb managed AI-driven quantitative trading portfolios at Goldman Sachs (\$10 billion AUM) and Clarium (Peter Thiel's \$6 billion global macro fund), built AI algorithms at Palantir Technologies (a CIA-backed Silicon Valley startup), and co-founded several technology startups, including Authy (Y Combinator class 2012, acquired by Twilio), Ride (with Uber co-founder Oscar Salazar, funded by TPG and Bono, acquired by Enterprise Holdings), and Pager (also with Oscar Salazar, funded by New Enterprise Associates and Ashton Kutcher). Gleb is a Chartered Financial Analyst (CFA) and a member of the New York Society of Security Analysts (NYSSA) and the Wharton Private Equity & Venture Capital Association. Gleb is also an Energy Risk Professional (ERP), as well as a graduate of the MIT Sloan Financial Technology program and the Reforge Growth Series with Andrew Chen.

Elevator Code 2525

	Sunday 31/12	Monday 1/1	Tuesday 1/2	Wednesday 1/3
	8:30 - 9:00 Gathering			
	9:00 - 9:30 Intro	9:30 - 9:45 Gathering	Start at 9:00	Start at 9:00
	9:30 - 10:30 Prof David Zvilichovsky The Israeli High Tech Ecosystem - History and Insights	Start at 9:45	9:00 - 10:00 Prof David Hsu "Venture Entry Strategy"	9:00 - 9:45 Eran Shir, CEO of Nexar
	10:30 - 10:45 Break	9:45 - 10:30 Yonatan Adiri - CEO of Healty.io	10:00 - 10:30 Nir Bar Lev - CEO Seematics	9:45 - 10:00 Break
	10:45 - 11:45 Prof Uria Shavit History of Israel and the Middle East	10:30- 10:45 Break	10:30 - 11:00 Travel to Ramat Hachayal	10:00- 11:15 Tal Slobodkin (Managing Partner - Stageone) & VC Panel: Asaf Horesh (Partner, Vintage IP); Aviad Ariel (General Partner, Vertex Ventures); Gil Caanani (General Manager, Hearst Ventures Israel)
	11:45 - 12:00 Break	10:45 - 11:30 Prof David Mendlovic, CEO of Corephotonics		11:15 - 11:30 Break
	12:00 - 13:00 Prof David Zvilichovsky The Israeli High Tech Ecosystem (Continued)	11:30- 11:45 Break	11:00 - 12:30 Visit Argus	
	13:00 - 14:00 working Lunch	11:45 - 12:30 Lotem Guy, Cybereason	12:30 - 14:00 Travel to Industrial Park - Nes Tziona (Near Rechovot) + Lunch on the way	11:30 - 12:15 Dov Moran
	14:00 - 15:00 Jon Medved Founder & CEO OURCROWD	From ~13:00 : Meeting with the project companies (Each team should independently coordinate on-site meeting with the respective project company executives) Refine hypothesis and recommendations	14:00 - 16:00 Visit Applied Materials	12:15 - 12:30 Break
	15:00 - 15:15 Break		Travel	12:30 - 13:15 Gigi Levi Founding Partner at NFX
	15:15 - 16:00 Yahel Zilka (Magma)			13:15 - 14:30 Lunch break + finalize presentations
	16:00 - 16:15 Break			14:30 - 15:45 Final presentations session 1
	16:15 - 17:00 DR. Amir Konigsberg, CEO, Twiggle	Group time - work on project & presentation	16:15 - 17:45 Visit Weitzman Institute	Break 15:45-16:00
	17:00 - 17:15 Break		Travel	16:00 - 17:15 Final presentations session 2
	17:15 - 18:00 Daniel Schreiber - CEO of Lemonade			Break 17:15-17:30
	18:00 - 19:30 Evening Social + New Year Drinks Hamiflat-tlv - Near Campus main entrance		18:45 Reception + Dinner <a href="#">Beit Kandidof - Jaffa</a>	17:30 - 18:00 Closing session

- Note: see Canvas and announcements for any changes to this tentative schedule