

15.364 Regional Entrepreneurial Acceleration Leaders (REAL)

MIT: Spring 2017

Have you ever wondered what makes innovation ecosystems like Kendall Square/Greater Boston, Israel or Silicon Valley such a special place for the formation and growth of entrepreneurial firms? Have you asked what other global regions – from Lima to London to Lagos - might learn from their experience to drive entrepreneurship and economic growth?

Have you thought about the strategic actions you and your organization – large corporation, government, not-for-profit – might undertake to access opportunities in a regional innovation ecosystem? And in turn how your organization might contribute effectively to your ecosystem? How might you design effective accelerators, prize competitions, co-working spaces etc.?

These questions are of central importance to those leading innovation in global corporations and in governments. It is also the responsibility of entrepreneurial leaders to understand how to create the conditions for the next generation of entrepreneurs who follow them!

REAL (Regional Entrepreneurial Acceleration Leaders) is a practical MIT course aimed at students wishing a research-based but action-oriented understanding of how to accelerate innovation-driven entrepreneurship (IDE) and build vibrant regional economies. Its starting point is the innovation-driven entrepreneurial ecosystem that has served as the foundation of many successful regions since the first industrial revolution.

The course assesses the innovation and entrepreneurship foundations of these systems. It then takes the perspective of the five critical stakeholders: entrepreneurs, risk capital providers, and universities, as well as policymakers (government) and large corporations. We provide tools for designing key programs and policies e.g. accelerators, prizes, visa policies, tax policies etc. - that can be implemented by stakeholders in regional economies worldwide.

COURSE OBJECTIVES

The emphasis throughout REAL is on both theory and practice: theories of innovation-driven entrepreneurial (IDE) growth are used as the basis of practical analyses of specific policies and catalytic programs that can be implemented by corporate leaders, entrepreneurs and investors to enable regional entrepreneurial acceleration.

Our objectives include providing you with:

- An MIT framework to help you analyze innovation ecosystems and their stakeholders, building on economic, political and social theories of how ecosystems accelerate economic prosperity.
- Insights into different regions worldwide both in terms of their current state but also the path dependencies that enable their current success (or failure) through the lens of the MIT framework.
- Detailed tools and metrics to design, implement and measure policies and programs that can be undertaken by a variety of stakeholders to accelerate ecosystem development and drive innovation strategy.
- Throughout we will examine regions in the USA, Europe, Asia, Middle East, Africa and South America, and we will cover sectors from IT and media, through clean energy, to the life sciences.

COURSE DESIGN

Seminar Sessions: We will achieve our objectives through a series of weekly interactive seminar-style discussions, in addition to short summary lectures on specific topics. We will also invite key speakers who have extensive experience in building innovation ecosystems from a corporate, entrepreneurial and/or government perspective, as well as leaders of accelerators and prizes.

Final Project: The final project is an opportunity for you to work in small teams to explore a region or policy/program of your choice, and produce a short written analysis (as well as a brief in-class presentation for your classmates). This is a chance to reflect and integrate the class lessons for regional entrepreneurial acceleration in a context of personal interest.

CLASS TIME & LOCATION

Tuesday: 5:00-8:00 PM (*see below for dates*), e51-149

NOTE: We will make video-conferencing available to a small number of students.

FACULTY:

Dr. Phil Budden	pbudden@mit.edu
Prof Fiona Murray	fmurray@mit.edu
Carolyn Fu (TA)	cjfu@mit.edu (please address queries to Carolyn)

READINGS:

Course material will also be made available through the **Stellar portal at:**
<http://stellar.mit.edu/S/course/15/sp17/15.364/>

MIT students who have added 15.364 to their registration should have automatic access (if not please email our TA). Non-MIT students please contact our assistants, Kim McGrath (mcgrathk@mit.edu) or Stephanie Taverna (staverna@mit.edu), for an @mit.edu Kerberos account.

GRADING

The class grade has three elements

1. Class participation (30%) – we expect you to participate in class (either in person or remotely). Excused absences are, of course, acceptable for personal or medical emergencies (please let the TA know via email). You should be prepared for discussion, having read the material critically.
2. Reflection Exercises (30%) – for classes with ecosystem exercises you must come prepared to reflect upon and describe your own innovation ecosystem (you may choose an ecosystem in which you have been located or another of interest to you). For two of these exercises please submit your written reflection in advance of the relevant class to the TA via Stellar.
3. Final Paper & Presentation (40%) – working in small teams (up to three people), you will develop a research report evaluating the past, current and future potential of a region or policy/program to drive innovation-driven entrepreneurship. In the case of a region, you will analyze the region over time through the MIT frameworks and make recommendations for its further upgrading. For those exploring a program/policy, please compare its success or failure in at least three or more modes of implementation. Your final paper should be 15 pages - including as much factual detail as possible. You will be asked to make a 10-minute presentation of your findings in class.

COURSE SCHEDULE

DATE	CLASS TOPIC
February 7	<p>Framework: MIT Innovation-Driven Entrepreneurial (IDE) Ecosystem Model</p> <p>MIT model of ‘innovation ecosystems’. Innovation-driven enterprises (IDEs vs. SMEs) and role of geography in agglomeration of IDEs (e.g. from Marshall to Moretti). Analyse through: Stakeholders, System and Strategy. Comparing the challenges and issues for innovation ecosystems in the developed versus the developing world.</p> <p><i>Case:</i> Kendall Square (with a focus on biotech)</p> <p><i>Exercise:</i> Describe your chosen innovation ecosystem – its strengths & weaknesses</p>
February 14	<p>Framework: <u>Stakeholders</u> - analyzing & engaging them</p> <p>Stakeholder model. Role of different stakeholders in building and contributing to Innovation Ecosystems. Changing role of stakeholders over time – path dependency. Importance of collective impact on stakeholder engagement. Examples from REAP teams, and U.S. example of Allentown vs. Youngstown.</p> <p><i>Case:</i> Silicon Valley</p> <p><i>Exercise:</i> Define & assess the key stakeholders in your innovation ecosystem</p>
February 21	<p>NO CLASS</p>
February 28	<p>Framework: <u>System</u> - analyzing & measuring the innovation ecosystem</p> <p>Importance of (and differences between) entrepreneurship and innovation, each with its own measurable capacity (iCap vs eCap). Comparing regions with high iCap with those with high eCap. Changing historical context. Simple metrics to capture an innovation ecosystem: a dashboard.</p> <p><i>Case:</i> Tokyo</p> <p><i>Exercise:</i> Report on your innovation eco-system metrics for iCap & eCap</p>
March 7	<p>Framework: <u>Strategy</u> - strategic policy/program interventions</p> <p>Understanding the role of comparative advantage in shaping opportunities for innovation ecosystem development. Basic approaches to determining comparative advantage (at a regional, national and global scale). Opportunities to intervene and amplify advantages through programs and policies. Challenges for building comparative advantage in the developing world.</p> <p><i>Case:</i> London’s Tech City</p> <p><i>Visitor:</i> Deval Patrick, former Governor of Massachusetts</p>

<p>March 14 (taught by Dr. Dan Fehder)</p>	<p>Deep Dive: Programs to Accelerate Ecosystems Developing an approach to the design of programmatic interventions. Exploring the range of programs. Defining the elements of program design (using the collective impact approach) as applied to accelerators. We will also explore how to develop effective and useful approaches to program evaluation. <i>Case:</i> MassChallenge versus Start-Up Chile <i>Visitor:</i> John Harthorne, MassChallenge</p>
<p>March 21/28</p>	<p style="text-align: center;">NO CLASS – SIP WEEK & SPRING BREAK!</p>
<p>April 4</p>	<p>Deep Dive: Policies & Programs to build Risk Capital Evaluation of a range of policies and programs to improve access and availability of risk capital e.g. Angel investment policy (UK – Lerner) & tax policies for early-stage capital. Alternative stakeholder programs to encourage risk capital development (e.g. government, corporate & university programs). <i>Case:</i> Israel & Start-Up Nation <i>Visitor:</i> Israel Ruiz (MIT Treasurer) on the MIT Engine</p>
<p>April 11</p>	<p>Deep Dive: Policies & Programs to build Innovation-Driven Entrepreneurial Culture Evaluation of a range of policies and programs to improve entrepreneurial human capital and build a more entrepreneurial culture. Policies e.g. visa policy, bankruptcy policy, non-compete agreements, and Programs e.g. hackathons, training and competitions. Approaches to measuring changing entrepreneurial culture. <i>Case:</i> Singapore <i>Panel:</i> TBD e.g. Malia Lazu (Future Boston), Katie Rae (StartUp Institute), Martha Gray (MIT HST – Impact Program)</p>
<p>April 18</p>	<p style="text-align: center;">NO CLASS – IN HONOUR OF PATRIOTS DAY!</p>
<p>April 25</p>	<p>Leadership: Ecosystem Engagement by Global Corporations Can large corporations connect effectively to established innovation ecosystems? We will examine the ways in which large corporations can engage for strategic advantage while also serving as honest brokers. We will explore a range of programs that corporations can design for effective ecosystem interaction. <i>Live Case:</i> GE in Boston: Sue Siegel or Erdogan Cesmeli & EMBA Team <i>Exercise:</i> Assessment of a corporation’s role in your innovation ecosystem</p>

<p>May 2</p>	<p>Leadership: Ecosystem Orchestration by Large Corporations</p> <p>Can large corporations <u>lead</u> ecosystem change? Using examples from a variety of different countries – Nokia/Finland, Microsoft/Beijing - we will examine the particular challenges faced by large corporations as they attempt to accelerate entrepreneurship and innovation in ecosystems where they are key anchors.</p> <p><i>Case: OCP Morocco</i></p> <p><i>Visitor: Lars Froeland (on university-corporate relationships)</i></p>
<p>May 9</p>	<p>Leadership: Ecosystem acceleration by Entrepreneurs</p> <p>We will explore the variety of roles that successful entrepreneurs can play in leading and shaping their innovation ecosystems by exploring several cases in the United States and elsewhere. Our focus will be on the opportunities and challenges that entrepreneur-driven ecosystems present, the importance of role-models, responsibilities of successful entrepreneurial leaders, and the role of the diaspora.</p> <p><i>Examples: Boulder (Brad Feld), Lagos (Tony Elumelu), London (Rohan Silva), Lawrence/Lowell (Desh Deshpande)</i></p> <p><i>Visitors: Georgina Campbell (Legatum) & Okendo Lewis-Gayle, Harambe Entrepreneurs</i></p>
<p>May 16</p>	<p>Student Presentations</p> <p>We will use the session as an opportunity to hear a short 10-15 minute presentation from each of the class teams. Each presentation will be followed by Q&A from the instructors and all class participants.</p>
<p>May 20-25 (OPTIONAL)</p>	<p>REAL in action: REAP teams (from Cohorts 3 and 4) at MIT</p> <p>Select students from the REAL class will be invited to meet some of the teams of stakeholders from around the world putting these MIT insights into action through the REAP program.</p>

READINGS

February 7

Framework: MIT Innovation-Driven Entrepreneurial (IDE) ecosystem model

We define and introduce the critical role of innovation-driven enterprises (IDEs), contrasting them with SMEs, as a core part of the MIT Innovation Ecosystem framework. Our focus will then shift to spatial patterns of economic activity (going beyond 'clusters' to 'ecosystems'), and how all this is distributed across regions and nations and over time. This will be illustrated with historical examples as well as contemporary ones, eg Kendall Square around MIT.

As you read, consider the following questions:

- **Why is 'location' - through agglomeration and co-location of firms - a paradox in today's knowledge economy? What are the factors driving agglomeration?**
- **What are the special characteristics of IDEs (as opposed to SMEs)?**
- **What are the factors that have shaped Kendall Square's success as an Innovation ecosystem?**
- **Consider a region you know well, what are the main opportunities/challenges contributing to its effectiveness as an innovation ecosystem?**

Readings

- Budden, Phil & Fiona Murray. 2015. MIT Case Study: MIT in Kendall Square
- Michael E. Porter. 1998. "Location, Competition and Economic Development: Local Clusters in a Global Economy" *Economic Development Quarterly*. 15-34.
- Bill Aulet and Fiona Murray. 2013. A Tale of Two Entrepreneurs: Understanding Differences in the Types of Entrepreneurship in the Economy. Kauffman Foundation Working Paper (8 pages)
- Feldman, M. P., J. Francis, and J. Bercovitz., 2005. "Creating a cluster while building a firm: entrepreneurs and the formation of industrial clusters." *Regional Studies* 39: 129-141.
- MIT Alumni Innovation Survey. 2015. Roberts, Murray and Kim.

February 14

Frameworks: analyzing and engaging Stakeholders

We introduce the 'MIT Stakeholder' model for building and contributing to Innovation Ecosystems. We will look at the 5 Stakeholders' different roles (eg in the history of Silicon Valley), and at how 'collective action' can now help engage stakeholders in regions. This session will also introduce MIT's "Regional Entrepreneurship Acceleration Program" (REAP) and the ways in which it is structured as an action-oriented approach to shaping ecosystems by convening regional stakeholders.

As you read, consider the following questions:

- **For 'Silicon valley', who were the key stakeholders in its 'history'?**
- **According to Saxenian, what were the factors shaping the success of Silicon Valley, over Boston's Route 128?**
- **Consider your chosen innovation ecosystem: what are the strengths and weaknesses of the various stakeholders in the innovation ecosystem? What is your role in this (or another) ecosystem?**
- **Who were the main actors contributing to its growth in the past? And today? Who is missing from your innovation ecosystem or failing to play their role?**

Readings

- AnnaLee Saxenian. 1996. "Inside-Out: Regional Networks and industrial Adaptation in Silicon Valley and Route 128" *CityScape: A Journal of Policy Development*.
- NPR: <http://www.npr.org/2012/03/26/149404846/the-birth-of-silicon-valley>
- Sydell, Laura. 2012. "[A Rare Mix Created Silicon Valley's Startup Culture](#)". NPR.
- Budden and Murray. Entrepreneurial Opportunity in the Global Innovation Economy. http://www.boston.com/business/blogs/global-business-hub/2014/01/greater_boston_1.html
- Kenney, Martin & Urs von Burg. 1999. "[Technology, Entrepreneurship and Path Dependence: Industrial Clustering in Silicon Valley and Route 128](#)". *Industrial and Corporate Change* (8), 67-103. (skim)
- Jaruzelski, Barry. 2014. "[Why Silicon Valley's Success is So Hard to Replicate](#)". *Scientific American*
- Florida, Richard. 2003. *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life* (New York: Basic Books). Please read the preface and Chapters 4 & 12.

February 28

Framework: analyzing and measuring the System (ie the innovation ecosystem)

In this session, we look at the two capacities within an innovation ecosystem – namely the 'innovation capacity' (iCap) and 'entrepreneurial capacity' (eCap) – as a tool for analysis, and comparison. To inform strategic options – and allow benching marking of any interventions – we then set out ways to measure change in these over time. Using these tools, we will then consider the experience of the Tokyo Team in REAP Cohort 3.

As you read, consider some of the following questions:

- **What are the key differences between 'innovation capacity' (iCap) and 'entrepreneurial capacity' (eCap)?**
- **What are the most effective measures that can capture each over time?**

- **What are the challenges in iCap and eCap that characterize Tokyo today and that the REAP Team is currently facing?**
- **Consider your chosen innovation ecosystem: what are the key metrics of iCap and eCap? Which metrics match your own personal perspective on the ecosystem and which are consistent?**

Readings

- Cusumano, Michael. The Puzzle of Japanese Entrepreneurship.
- <http://www.latimes.com/world/asia/la-fg-japan-entrepreneurs-20150329-story.html>
- https://www.washingtonpost.com/world/asia_pacific/japanese-entrepreneurs-face-a-special-challenge-the-wife-block/2016/06/21/1df476ca-324c-11e6-ab9d-1da2b0f24f93_story.html?utm_term=.ac72fc8f1527
- <https://home.kpmg.com/xx/en/home/insights/2016/05/japan-challenge-is-entrepreneurship-not-innovation.html>
- Bosma, N., Coduras, A., Litovsky, Y. and J. Seaman. 2012. “[GEM Manual: A report on the design, data and quality control of the Global Entrepreneurship Monitor](#)”. Global Entrepreneurship Monitor. **(skim)**
- Massa, Silvia & Stefania Testa. 2008. “[Innovation and SMEs: Misaligned perspectives and goals among entrepreneurs, academics, and policy makers](#)”. *Technovation* 28, 393-407.

March 7

Framework: Strategy, and strategic policy/program interventions

We use the case of London’s growing IDE activity to address the question of whether and how entrepreneurial ecosystems can be accelerated through well-designed strategic interventions. We explore the factors that shaped the rise of London and the key policies that have been enabling its recent success. In particular, we contrast Porter’s traditional cluster approach with that for IDE ecosystem policy.

As you read, consider the following questions:

- **What policy interventions are suggested by a Porter cluster-based approach? How might the MIT Innovation Ecosystem models suggest alternatives?**
- **Using the MIT frameworks, assess the state of London’s IDE ecosystem in 2010: What were the strengths & potential weaknesses it faced?**
- **What types of strategic intervention would you propose? Should it focus on a specific sector?**
- **What were the tensions that seemed to arise between the government and entrepreneurial community? How might these be avoided, or is this sort of creative tension inevitable and productive?**

Readings

- Budden, Phil & Fiona Murray. 2014. MIT Case Study. "London"
- Porter, Michael E., and Christian H.M. Ketels. "UK Competitiveness: Moving to the Next Stage." DTI Economics Paper Report Series, No. 3, 2003.
- Budden, Phil & Fiona Murray. 2013. "London TechCity: An Emerging Entrepreneurial Ecosystem" in Boston Globe.
http://www.boston.com/business/blogs/global-business-hub/2013/03/london_tech_cit.html
- McKinsey: 2011. *East London: World class center for digital enterprise*.
- Report on REAP Team London and 'Growth Builder' [Alum magazine]

March 14

Deep dive: Programs to Accelerate Ecosystems

This session outlines the catalytic programs that may be implemented to accelerate innovation ecosystems. Their effectiveness depends upon design and implementation. Through a comparison of MassChallenge and StartUp Chile, we will determine their key design variables, the potential role of stakeholders and the ways in which such programs must be designed to complement underlying iCap and eCap in a region.

As you read, consider some of the following questions:

- **Why are accelerators considered to be effective programs that can rapidly improve Innovation Ecosystems? How do they shape iCap and eCap?**
- **What contribution does MassChallenge make to the Boston ecosystem?**
- **How does StartUp Chile compare to MassChallenge in its design? How are their different design features appropriate to their distinctive missions?**
- **How should you measure the possible success and impact of accelerators or other programs?**

Readings

- Fehder, Dan; Budden, Phil & Fiona Murray. 2014. MIT Case: "MassChallenge"
- Josh Lerner et alia. HBS Case Study (2012) StartUp Chile.
- Feld, Brad. 2012. StartUp Communities: Building an Entrepreneurial Ecosystem in your City. Chapter 8 – the Power of Accelerators.
- Seed Accelerator Rankings Project.
http://www.seedrankings.com/pdf/sarp_2014_accelerator_rankings.pdf
- Fehder, Hochberg & Murray. 2013. Accelerating Innovation Ecosystems. MIT Lab for Innovation Science Working Paper

April 4

Deep dive: Policy & Program Interventions to build Risk Capital

The session explores the importance of risk capital, and the policies supporting it by exploring of a range of policies and programs designed to improve access and availability of risk capital e.g. Angel investors, tax policies for early-stage capital and programs to encourage risk capital development (e.g. Yozma).

As you read, please consider some of the following questions:

- **In Start-Up Nation what are the factors shaping Israel's success?**
- **What were the historical factors and path dependencies that positioned Israel's comparative advantage? What policies & programs did Israel design to effectively drive early-stage capital flows into IDEs?**
- **Do you agree with Lerner's argument that governments should NOT use public funds or do you think there are circumstances when you might make an alternative decision?**

Readings

- Senor, D. and S. Singer. 2009. StartUp Nation: The Story of Israel's Economic Miracle. Includes the story of 'Better Place' startup. Available to buy at http://www.amazon.com/Start-up-Nation-Israels-Economic-Miracle/dp/0446541478/ref=sr_1_1?s=books&ie=UTF8&qid=1378133785&sr=1-1&keywords=start+up+nation
- "A broken place", Fast Company article (2014) update on 'Better Place' startup. <https://www.fastcompany.com/3028159/a-broken-place-better-place>
- Yozma Program 15 Year Perspective. Gil Avnimelech. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2758195
- Lerner, J. 2011. Boulevard of Broken Dreams: Why Public Efforts to Boost Entrepreneurship and Venture Capital have failed. Ch 6: How Governments go Wrong.

April 11

Deep dive: Policy & Program Interventions to build IDE culture

In this session, we will continue our detailed analysis of policies that can accelerate IDE entrepreneurship. Our focus today is on policies that shape the nature and availability of talented individuals in ecosystems, with a special focus on attracting and building entrepreneurial talent (and culture). We will emphasize this in the case of Singapore.

As you read, consider some of the following questions:

- **What are the challenges and opportunities in Singapore's innovation ecosystem? What type of human capital is missing in Singapore?**
- **What would you recommend the government do to solve its problems?**

- **What sorts of human capital programs might make a difference to the entrepreneurial capacity (and entrepreneurial culture) of a region?**
- **What policies can a government use to shape the flows and capacity of talent? How do visa and non-compete policies matter?**

Readings

- MIT Case Study: Singapore (Fiona Murray and Phil Budden).
- Entrepreneurship Education & Training Programs around the World. Chapter 4 (EET Program Landscape & Analysis). Valerio, Parton, Robb. The World Bank.
- Wadhwa, V. et al. 2009. America's Loss is the World's Gain. Kauffman Foundation White Paper on Visa Policy.
- Marx, M. and L. Fleming. 2011. "Non-compete Agreements: Barriers to Entry... and Exit?" *Innovation Policy and the Economy* (12) (SKIM)
- Edward L. Glaeser. 2007. Do Regional Economies Need Regional Coordination?
- Economist: <http://www.economist.com/news/special-report/21657606-continue-flourish-its-second-half-century-south-east-asias-miracle-city-state>
- Economist: <http://www.economist.com/news/special-report/21657609-after-decades-prudence-singapore-well-prepared-most-eventualities-years>
- National Foundation for American Policy. 2010. H1B Visas By the Numbers. Available at <http://www.nfap.com/pdf/1003h1b.pdf>

April 25

Leadership: Ecosystem engagement by global corporations

This session is one of three final sessions on the role of different stakeholders in orchestrating and implementing ecosystem change and acceleration. In this and the session that follows we will consider the ways in which global corporations can effectively engage with well-established innovation ecosystems to both strengthen, but also draw from, the ecosystem in a way that is aligned with their corporate innovation strategy.

As you read, consider some of the following questions:

- **How do global corporations decide in which locations (eg 'ecosystems') to undertake which corporate activities, like R&D/research/corporate venturing?**
- **How should global corporations assess and evaluate such ecosystem engagement in an on-going way?**
- **What are the programmatic approaches that a corporation might choose to adopt and under what circumstances would you recommend each?**
- **Why did General Electric (GE) move its global HQ to downtown Boston?**

Readings

- MacCormack, Alan, Fiona Murray & Erika Wagner (2013). How Competition can Spark Innovation. *Sloan Management Review*.
- Budden, Phil & Fiona Murray: "GE relocates..."
<http://executive.mit.edu/blog/insights-for-ge-as-it-relocates-to-bostons-unique-innovation-ecosystem#.WH1WGrGZNE4>
- GE CEO on why he moved HQ to Boston:
<http://www.citylab.com/work/2016/09/why-ge-moved-from-bridgeport-to-boston-atlantic-ideas-forum/502061/>

May 2

Leadership: Ecosystem engagement by large corporations

Beyond engaging with existing ecosystems, can large corporations lead ecosystem change? Using examples from a variety of different countries – Nokia/Finland, OCP/Morocco, Alibaba/China, Microsoft/Beijing – we will address the ways in which large global corporations might accelerate innovation ecosystems and the challenges that they confront in doing so. We will examine the particular challenges faced large corporations face in attempting to serve as honest brokers in a broader ecosystem.

As you read, consider some of the following questions:

- **Can large corporations embedded in a location contribute to its innovation-driven entrepreneurial (IDE) advantage?**
- **What sort of 'ecosystem strategy' might such a corporate undertake and what type of programs might this imply?**
- **What was the experience of Nokia in Finland, OCP in Morocco, Microsoft in Beijing?**
- **Consider your chosen innovation ecosystem: are there comparable corporates which might play a similar role in your ecosystem?**

Readings

- OCP Case Study.
- Guanxi: Microsoft, China, and Bill Gates. Buderl and Huang. Selected Chapters
- Nokia's Fall means the Rise of Start-Ups in Finland. TechCrunch.
<https://techcrunch.com/2015/11/11/nokias-fall-means-the-rise-of-startups-in-finland/>
- http://www.nokia.com/en_int/about-us/what-we-do/innovation-ecosystem
- Analyses on the Finnish High-Growth Ecosystem. (selected excerpts)
<https://aaltodoc.aalto.fi/bitstream/handle/123456789/12444/isbn9789526055572.pdf?sequence=1>

May 9

Leadership: ecosystem acceleration by entrepreneurs

Can 'entrepreneurs' themselves – either those embedded in a location, or mobile 'innovation-driven' ones – have a positive impact on such an ecosystem? Can entrepreneurs play a 'leadership' role within their ecosystem? What you would propose if you were to be in this role?

As you read consider the following questions:

- **How might location-based entrepreneurs help (and stay in?) a home region?**
- **What might attract mobile 'innovation-driven' entrepreneurs to a region?**
- **How might a region's entrepreneurial diaspora help the home region build its innovation ecosystem?**
- **Can the right sort of 'university' play a supportive role?**

Readings:

- Brad Feld. *Start-Up Communities* (available at <http://www.amazon.com/Startup-Communities-Building-Entrepreneurial-Ecosystem/dp/1118441540>). See chapters 1 and 3 on Building an Entrepreneurial Ecosystem in your City; chapter; and chapter 10. 5 on Attributes of Leadership.
- <http://www.cnn.com/2016/08/09/zappos-ceo-tony-hsieh-what-i-regret-about-pouring-350-million-into-las-vegas.html>
- <http://www.newsweek.com/downtown-las-vegas-strip-sin-city-tony-hsieh-hipsters-affordable-housing-421283>
- Graham, Ruth. 2014. *Creating University-Based Entrepreneurial Ecosystems*. Executive Summary
- <http://techcrunch.com/2013/05/31/russia-hopes-the-skolkovo-tech-city-will-produce-its-great-leap-forward/>

May 16

Student Presentations of their REAL Projects

May 20-25

Optional: REAL in action: REAP Teams (from Cohorts 3 and 4) at MIT