



Overview - MIT REAP:
Achieving Economic Growth
Through Innovation-Driven
Entrepreneurship



MIT Regional Entrepreneurship Acceleration
Program (MIT REAP) A Program of
MIT Sloan Executive Education Supported by
the MIT Innovation Initiative reap.mit.edu

Program Overview:

The MIT Regional Entrepreneurship Acceleration Program (MIT REAP) provides opportunities for communities around the world to engage with MIT in an evidence based, practical approach to strengthening innovation driven entrepreneurial (IDE) ecosystems. We achieve this by:

- Translating research and expertise into practical frameworks, approaches and actions with widespread global application
- Convening stakeholders from around the world to build a community for collaboration and learning focused on IDE
- Educating regional innovation ecosystem leaders through team-based learning to facilitate meaningful social and economic outcomes

MIT REAP is designed for high-level teams selected from regions dedicated to working alongside MIT faculty over a 2-year period to drive innovation-driven entrepreneurship in their particular city, region or country¹. Regional teams of 5-

8 leaders drawn from 5 stakeholder groups (government, risk capital, universities, entrepreneurs, and corporates) work collectively with one another, with others from their region, with MIT thought leaders and with other teams to build an action-based strategy for change.

This hybrid educational, economic development and convening program at the Massachusetts Institute of Technology (MIT) ultimately enables regional stakeholders to accelerate economic growth and job creation. At its core, this program draws on MIT research that emphasizes an ‘innovation ecosystem’



framework focused on the distinct, yet interdependent, roles of innovative capacity (the ability to develop new

¹F. Murray, S. Stern, Science 348.6240 (June 2015).
http://www.sciencemaginedigital.org/sciencemagazine/12_june_2015?pg=31#pg31

technology) and entrepreneurial capacity (the ability to scale startup businesses). It builds on evidence that successful regions link entrepreneurship and innovation to uncover a comparative advantage²through innovation-driven entrepreneurship (IDE)³.

Up to 8 diverse regions comprise a Cohort⁴



First, they build their team and then undertake a systematic, data-driven, regional assessment to measure their innovation ecosystem's "as-is-state"⁵. They then develop a clear understanding of their potential comparative advantage as an innovation ecosystem. In the later phases, they develop a strategy and build an organization to sustain on-going collective action. Regional leaders, not MIT faculty, determine what their region needs and how best to implement their

that together engages with MIT faculty (and one another) to leverage MIT expertise and frameworks in an action-learning program that culminates in the delivery of collective action focused on accelerating innovation-driven entrepreneurship. Over the 2 years, teams build their activities in 5 phases.

chosen strategy.

Global in focus, the program is structured to allow MIT faculty and staff to engage deeply with regions worldwide, to share cutting edge research and best practice and to learn from (and disseminate) lessons learned. Participants 'learn by doing' and benefit greatly from MIT, past Cohort mentorship and current Cohort community building.

Entering its 4th year, MIT REAP has engaged over 23 regions around the world⁶ and is already seeing positive impact. Regional teams have released actionable strategic plans for entrepreneurial acceleration⁷, catalyzed the development

² See here for an innovation podcast by Associate Dean Fiona Murray: <http://a16z.com/2014/09/30/a16z-podcast-creating-new-silicon-valleys/>, and a recent presentation by Prof. Scott Stern on "Investing in your Regional Comparative Advantage": <http://www.slideshare.net/TCLNetwork/tci-2014>

³ Innovation-Driven Enterprises (IDEs) pursue global opportunities based on bringing customers new innovations that have clear competitive advantage and high growth potential. By innovation, we mean new-to-the-world ideas in the technical, market, or business model domain. IDEs are distinct from SMEs. As noted in Aulet & Murray (2014) A Tale of Two Entrepreneurs "policymakers and pundits who use entrepreneurship as a "catch-all" phase to capture a single economic activity make an important mistake. There are 2 distinct types of entrepreneurship (IDEs and SMEs) with different economic roles, requiring individually tailored policies to support each."

⁴ A cohort model typically refers to a group of people who enter and participate in a program together and

remain together throughout its duration.

⁵ J. Guzman, S. Stern, Science 347.606 (February 2015). <http://www.sciencemag.org/content/347/6222/606>

⁶ Cohort 1 members (2012-2014) included: Scotland (UK), Finland, New Zealand, Andalusia (Spain), Hangzhou (China), Veracruz (Mexico) and Istanbul (Turkey). Cohort 2 members (2014-2016) include: London (UK), Singapore, Seoul (South Korea), Qatar, Moscow (Russia), Morocco, Puerto Rico (USA) and Valencia (Spain). Cohort 3 members (2015-2017) include: Wales (UK), Santiago (Chile), Ashdod (Israel), Al Madinah (Saudi Arabia), Tokyo (Japan), Beijing (China), SW Norway, Bangkok (Thailand) <http://reap.mit.edu/#partner-regions>

⁷ Team Scotland release a report that highlights a strategy to enhance Scotland's systems for supporting

of nascent entrepreneurial ecosystems⁸, and launched new IDE acceleration programs^{9,10}.

Key Characteristics of MIT REAP

MIT REAP's approach is distinctive from traditional executive education and from economic development consulting partnerships on several dimensions. Through the support from the MIT Innovation Initiative (MITii¹¹), REAP is also able to leverage MITii's experience in leading innovation and entrepreneurship across broader global communities. It's a team-based, action-learning oriented education program in which teams work with MIT faculty to develop their own insights and plans for change. By working in multi-stakeholder regional teams, regions can focus on collective action and impact rather than the perspective of a single stakeholder. By focusing on action-oriented education, teams come to their own conclusions and are thus highly motivated for change.

MIT REAP builds on MIT's extensive experience as a key stakeholder in a leading innovation ecosystem. It also builds on its experience and scholarship leading innovation and entrepreneurship for a broader global community. Not only does MIT faculty include world leaders in innovation 'science'¹², the 'practice' side is represented by the ability of MIT's faculty, staff, students and alumni to generate patents and launch sustainable high-growth firms at unprecedented rates¹³.

Together, MIT REAP builds upon MIT's long tradition of mixing science and practice (what we refer to as "Mens et Manus").

Innovation Practice

Frameworks, data and insights are shared in an action-based educational context over the course of 4 faculty-led Workshops delivered during a 2-year period. Each region, led by a team champion, sends a team of 5-8 senior leaders (representing the 5 stakeholder groups) to the 4

entrepreneurial activity, based on results and recommendations of their participation in REAP. See [here](http://www.hie.co.uk/business-support/entrepreneurship/mit-reap/default.html) for a link to the executive summary and full report: <http://www.hie.co.uk/business-support/entrepreneurship/mit-reap/default.html>

⁸For example, Team Hangzhou champions, Zhang Jie and Fang Yi, were recently celebrated in [the following NYT article](http://www.nytimes.com/2014/09/18/allibaba-with-its-1-p-o-mints-millionaires-and-risk-takers/?_r=1) for playing a lead role in the development of the Hangzhou entrepreneurship ecosystem: http://dealbook.nytimes.com/2014/09/18/allibaba-with-its-1-p-o-mints-millionaires-and-risk-takers/?_r=1

⁹Team Veracruz launched a successful innovation-driven program to enhance entrepreneurship throughout Veracruz. See here for a link to the iLab website: <http://www.ilab.net/>

¹⁰Team Finland launched Finland's Innovative Cities Program to create internationally attractive

innovation clusters in Finland based on top-notch talent. See here for more information: <http://www.tekes.fi/en/programmes-and-services/tekes-programmes/innovative-cities/>

¹¹ <https://innovation.mit.edu/>

¹²See here for a selection of innovation-focused MIT faculty and publications: <http://reap.mit.edu/resources/>

¹³See here for a report on Entrepreneurial Impact of MIT: <http://ilp.mit.edu/media/webpublications/pub/literature/Entrepreneurial-Impact-2011.pdf>

Workshops (all but one is held at MIT).

Workshops use lectures and case studies but also ask teams to reflect immediately on the lessons they draw for their own region, receiving immediate feedback from faculty and other teams. This stakeholder team-based learning approach is a driver of change in a safe, neutral environment. By having 8 regions in a Cohort, each Workshop also emphasizes cohort-based learning to facilitate best practices and lessons learned sharing across regions.

Between each Workshop, the teams engage in an Action Phase where they position themselves to decide on a strategy and implementation plan. There are several assignments over the course of an Action Phase leading up to the next Workshop. Teams commit to a certain set of deliverables, and are accountable not only to MIT faculty but also to their Cohort peers. Teams are in contact with MIT faculty during the Action Phases between Workshops and the teams are in bi-weekly communication with the MIT REAP Director.

Innovation Science

MIT REAP is founded on MIT's expertise in the 'science of innovation', i.e. robust evidence-based understanding of the innovation process at the regional level that defines what works, in practice, for accelerating innovation-driven entrepreneurship. These frameworks build upon both the research and practical expertise of MIT's faculty. They enable participating regions to build their own internal understanding of their innovation ecosystem, to develop and implement strategies customized to their comparative strengths and advantages. Recognizing that each region must follow a strategy that accounts for its unique situation, MIT REAP advises the stakeholder teams but does not instruct a region on how to operate.

At the core of the MIT REAP approach to innovation science is an innovation ecosystem framework that makes a critical distinction between innovation capacity (iCap) and entrepreneurial capacity (eCap). MIT faculty help the teams explore how these capabilities are developed and linked over time. Building on this framework, MIT REAP provides a clear set of metrics and evaluation methods for regions to develop and measure the initial

“as is” state of their innovation ecosystem, as well as the rate at which innovation-driven enterprises are increasing job growth and prosperity (GDP/capita).

MIT REAP has a model of ecosystem change that outlines a set of programmatic and policy interventions (PPIs) for change. During the Workshops, case studies and research analysis provide systematic evidence for when each might work best, as well as the tradeoffs. Program Interventions include prizes, accelerators, entrepreneurship education and mentoring activity. Formal policies, which MIT research has shown can play an instrumental role in accelerating such innovation-driven entrepreneurship, include non-compete agreements, IP policy etc.¹⁴. MIT REAP also helps regions design these elements tailored to their ecosystem, as well as how to monitor and evaluate progress over time.

Advantage of MIT REAP's Approach

The integrated approach of innovation science and innovation practice together helps regions to:

- Understand the current state of their IDE ecosystem - their strengths, weaknesses and comparative advantage- through the lens of systematic MIT frameworks.
- Develop a customized and actionable strategy to strengthen their comparative advantage and enhance their IDE ecosystem.
- Engage with the local and global thought leaders and doers necessary to ensure successful creation and implementation of their strategy.
- Implement policies and programs for accelerating innovation-driven entrepreneurship and job creation in their region.

MIT REAP provides a platform for sharing this knowledge and experience through engaging a diverse group of MIT faculty, each bringing a different set of perspectives and expertise to the table, from the economist and policymaker to the entrepreneur¹⁵. MIT in turn also utilizes MIT REAP to build out research projects, case studies and further exploration into innovation and entrepreneurship to create even greater impact.

Established through many years of

¹⁴For example, see here for a recent publication by MIT REAP faculty on Grand Innovation Prizes (GIPs): <http://www.sciencedirect.com/science/article/pii/S004873331200217X>

¹⁵See here for a list of core REAP faculty and supporters:

<http://reap.mit.edu/#our-team>

experience of teaching and mentoring students and regional ecosystem leaders, the key characteristics of MIT REAP are integrated by MIT faculty to ensure effective learning and implementation of regional IDE strategies. Each design element may not be unique in isolation but together form the unique foundation of MIT REAP and are core to the success of the program.

ADMISSIONS PROCESS – 2017

MIT REAP is currently receiving applications for MIT REAP Cohort 5, running from 2017 to 2019. The first Workshop for Cohort 5 launches October, 2017 at MIT.

1. Complete MIT REAP application form (<http://reap.mit.edu/apply/>), identify a team champion and secure funding sources (payment: \$300,000).
2. Receive Admissions decision by MIT REAP committee.
3. Champion will submit a signed Letter of Agreement (LOA) to reserve a spot in the next cohort (upon acceptance).
4. Teams will finalize their 6-8 core members. Each team must have at least 1 representative from each of the 5 stakeholder groups (university, corporate, risk capital, entrepreneur, and government).

5. Submit First Tuition Payment

TABLE 1: Summary of Core Design Elements

Emphasis on innovation-driven entrepreneurship (IDE)	✓
Emphasis on systems view (based on MIT framework)	✓
Emphasis on programmatic & policy interventions (PPIs)	✓
Structured 2-year journey that involves elements of education, strategy development & implementation	✓
Action-oriented approach (in line with MIT's mens et manus (mind and hand) approach)	✓
Multi-stakeholder team and community engagement (including government, risk capital, academia, entrepreneurship community, and corporate enterprises)	✓
High engagement of MIT faculty with diverse expertise and perspectives	✓
Focus on a region's comparative advantage in innovation viewed globally	✓
Use of cohort model to ensure consistency, collaboration and accountability	✓
Best practice based on rigorous academic research and practical experience or running programs	✓